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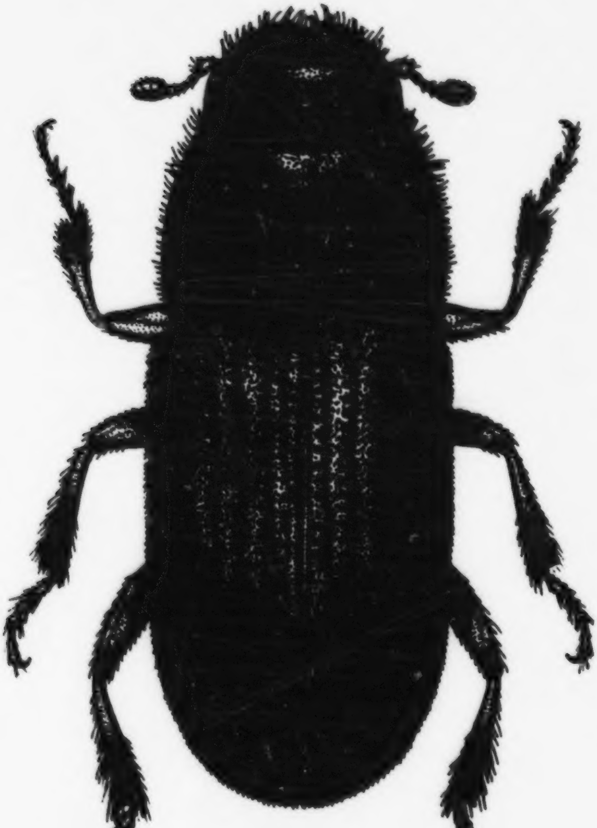
A Catalog of Scolytidae and Platypodidae (Coleoptera), Supplement 2 (1995–1999)



Donald E. Bright
Robert E. Skidmore

A Catalog of Scolytidae and Platypodidae (Coleoptera), Supplement 2 (1995–1999)

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A Catalog of Scolytidae and Platypodidae (Coleoptera), Supplement 2 (1995–1999)

Donald E. Bright and Robert E. Skidmore

Research Branch
Agriculture and Agri-Food Canada
Ottawa, Ontario K1A 0C6

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Abstract

This is the second supplement to the 1992 *Catalog of the Scolytidae and Platypodidae (Coleoptera) of the World* (Wood & Bright 1992, Great Basin Naturalist Memoir 13). It updates the taxonomy, distribution, biology, and literature pertaining to these families to the end of 1999. The format of this supplement follows closely that of the 1992 catalog and Supplement 1 (Bright & Skidmore 1997). Each genus and species is listed with its page number from the 1992 catalog, or in the case of species described since 1992, the page number from Supplement 1. Additional information on figures, distribution, hosts, and references relating to one or more of eight subject areas, as used in the 1992 catalog, are given. The bibliography used with this supplement lists 1341 references, most published between 1995 to the end of 1999. Several post-1999 references are included in order to make the taxonomic and distributional data in this supplement as current as possible, and a few pre-1995 references are included when their information is deemed to be valuable for future research.

A complete index of all species names, both valid and synonyms, used for the Scolytidae and Platypodidae is included. These indexes reflect all nomenclatural changes summarized in Supplement 1 and the present supplement, plus all species names from the 1992 catalog. Thus, each index is a complete, up-to-date list of all species of the Scolytidae and the Platypodidae for the world. All of the generic names referenced in Supplement 1 and the present supplement are also included in these indexes, but their synonyms are not included unless the names have been used in the references examined.

Numerous new distributional data are included in an appendix. Each entry provides details of the new country localities reported in Supplement 1 and the present supplement.

New synonymy proposed: *Prionosceles imitans* Eggers, 1940:136 (= *Scolytodes nitidissimus* (Eggers 1940:135)).

New combinations proposed: *Webbia talauricus* (Eggers), from *Arixyleborus*.

Replacement names proposed: *Hypothenemus insulanus* Bright, replacement name for *Hypothenemus pacificus* Bright & Peck 1998, not *H. pacificus* (Beeson) 1940; *Polygraphus yunnanensis* Bright, replacement name for *P. querci* Yin & Huang 1996, not *P. querci* Wood 1988.

Résumé

Cet ouvrage constitue le deuxième supplément du répertoire de 1992 *Catalog of the Scolytidae and Platypodidae (Coleoptera) of the World* (Wood & Bright 1992, Great Basin Naturalist Memoir 13). On y signale des données de taxonomie, de répartition, de biologie et de documentation associées à ces familles jusqu'à la fin de 1999. Sa présentation reprend celle du répertoire de 1992 et de son premier supplément (Bright & Skidmore 1997). Chaque genre et espèce sont désignés selon le numéro de page du répertoire de 1992 ou, dans le cas des espèces décrites après 1992, selon le numéro de page du premier supplément. On y retrouve aussi de l'information complémentaire relative aux illustrations, à la répartition, aux hôtes et aux références bibliographiques dans au moins une des huit rubriques définies, comme c'était le cas pour le répertoire de 1992. La bibliographie de ce supplément rend compte de 1341 ouvrages, la plupart publiés entre 1995 et la fin de 1999. On y signale en outre plusieurs ouvrages publiés après 1999, afin de présenter l'information la plus à jour qui soit sur la taxonomie et la répartition, ainsi que quelques ouvrages publiés avant 1995, lorsque l'information promet d'être utile aux futures recherches.

L'ouvrage comprend un index exhaustif de tous les noms d'espèces, officiels et synonymiques, pour les Scolytidae et les Platypodidae. L'index rend compte de tous les changements de nomenclature résumés dans le premier supplément ainsi que dans ce deuxième supplément ainsi que de tous les noms d'espèces recensés dans le répertoire de 1992. L'index constitue donc une liste complète et à jour de toutes les espèces de Scolytidae et de Platypodidae du monde. L'index comprend aussi tous les noms génériques cités dans les deux suppléments. Leurs synonymes ne sont toutefois pas indiqués à moins qu'ils n'apparaissent dans les ouvrages de référence consultés.

L'annexe comprend de nouvelles données de distribution géographique. Chaque inscription propose une liste des nouveaux emplacements de peuplement signalés dans les deux suppléments.

Nouveau synonyme proposé : *Prionosceles imitans* Eggers, 1940:136 (= *Scolytodes nitidissimus* (Eggers, 1940:135)).

Nouvelles combinaisons proposées : *Webbia talauricus* (Eggers), de *Arixyleborus*.

Substitutions proposées : *Hypothenemus insulanus* Bright, en substitution de *Hypothenemus pacificus* Bright & Peck 1998, et non *H. pacificus* (Beeson) 1940; *Polygraphus yunnanensis* Bright, en substitution de *P. querci* Yin & Huang 1996, et non *P. querci* Wood 1988.

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Introduction

This is the second supplement to the 1992 *Catalog of the Scolytidae and Platypodidae (Coleoptera) of the World* published by Wood and Bright in 1992 (hereafter referred to as the "1992 catalog"). The information in the 1992 catalog was complete to the end of 1989, and Supplement 1 (published in 1997 by Bright and Skidmore) updated the biological information and references to the end of 1994. The present supplement updates the taxonomy, distribution, biology, and literature pertaining to these families to the end of 1999. Several 2000 and 2001 references which provide new information on taxonomy are included in order to make the taxonomic information as complete as possible, and several pre-1994 references are included that were either missed in Supplement 1 or are referred to in the present supplement as sources of biological data. A total of 1341 references are included in this supplement.

In the 1992 catalog and Supplement 1, we mentioned several items of special interest and concern. The first of these was the ever-increasing numbers of species of Scolytidae that were being introduced into various regions of the world, owing to increased commerce. That concern has not lessened during the past 5 years and has, in fact, increased. The economic impact of these introductions is now being keenly felt. At least 35 species of Scolytidae are known to be introduced into North America (Mattson et al. 1994, see Bibliography). Attempts to introduce unprocessed logs and wood products into North America continues to be an issue, even though the dangers are well documented.

The second concern expressed was the lack of young, serious taxonomic specialists in the Scolytidae and Platypodidae. That concern now seems to be alleviated, since several young specialists are now established and should be able to provide identifications and information to the forestry and agricultural community.

The third area of concern, mentioned only in Supplement 1, was the reduction of funding provided to research libraries to enable them to keep up with the tremendous amount of information now being produced. That concern is still evident and, in fact, has increased. Funding cuts have continued to erode the ability of the Agriculture and Agri-Food Canada libraries to keep abreast of the literature, and a similar situation is affecting most research libraries. In Canada, subscriptions to numerous scientific journals have been cut, resulting in delays in obtaining information needed for this supplement. Funding for book purchases has not been able to keep up with information explosion, again resulting in delays and omissions. The cost of maintaining subscriptions to abstracting services, such as BIOSIS and CABI, continues to rise and takes a larger percentage of the library budget. Even so, the librarians and library workers in the Agriculture and Agri-Food Canada libraries have done a superb job in providing us with the literature required.

Because of the above circumstances, the production of the present supplement has relied more heavily on abstracting services such as CAB Index (Commonwealth Agricultural Bureau), Agricola, and Biosis (Biological Abstracts) than was the case for the previous volumes. As good as these abstracting services are, they do not provide complete coverage of the literature, and the coverage they do provide is often misleading or inaccurate. Access to original references is essential for correct understanding of the literature.

During most of the time while the original 1992 catalog was under production, adequate personal computers and cataloging software were not available. Although the 1992 catalog was produced on computers, it was in a word processing format, not in a database. Because no published catalog can ever be completely up-to-date (even with periodic supplements), we have been inputting the basic taxonomic and distributional data contained in the 1992 catalog and both supplements into a database program developed by taxonomists in the Canadian National Collection of Insects (CNCI). It is intended that this electronic version of the catalog of the Scolytidae and Platypodidae will be placed on the CNCI website where it will be available to colleagues at <http://res2. agr.ca/ecorc/pubs.asp>. Included in this database are all species and their synonyms, type data, distributional data, and references referring only to the 1992 catalog and its supplements. The entire list of literature citations and references contained in the 1992 catalog and its supplements are not included; they can be obtained only in the published documents.

Just before the manuscript of this supplement was submitted for publication, an important paper dealing with the phylogeny of the Platypodidae was received. Kuschel et al. (2000) considerably altered the concept of the Platypodidae by combining the Scolytidae and Platypodidae into a single taxonomic unit, the Scolytinae; and several genera, currently in the Scolytidae, i.e., *Protoplatypus* Wood and *Phylloplatypus* Kato, were moved to the Cossoninae. Further modifications of the Scolytidae (Scolytinae) are to be expected as more tribes and genera are more closely examined. In this supplement, we retain the names Scolytidae and Platypodidae, since these names were used in the previous catalog and in Supplement 1. Also, these names are more familiar for those workers not especially involved with phylogenetics.

The production of the 1992 *Catalog of the Scolytidae and Platypodidae* (*Coleoptera*) *of the World* and its two supplements have consumed almost 20 years of my (DEB) time and an equal amount (or more) of the time of Dr. S.L. Wood, an esteemed colleague and the senior author of the 1992 catalog. The work has been both enjoyable and frustrating, and we hope that it will be of lasting value to our present and future colleagues.

Methods

The present supplement closely follows the format of Supplement 1 (1997). Details of these methods may be found in that publication. A few departures or additions from that format are noted below.

1. As was done in Supplement 1, species are listed by the page number on which the species first appears in the 1992 catalog. An "S" after a page number refers to the page number in Supplement 1 and relates to species described since 1992 and therefore not listed in the 1992 catalog.

2. A complete index of every generic name presently recognized as valid and every species (and their synonyms) of Scolytidae and Platypodidae is included at the end of this supplement. Generic synonyms are not included unless they have been validated since 1992 or are mentioned in the literature examined for this supplement. Complete generic synonyms can be found in the index included with the 1992 catalog. For each taxon, the page number is given where it appears in the 1992 catalog, the first supplement, and the present supplement.

3. In Supplement 1 and in the present supplement, new, previously unpublished country records are given in **bold**. No details of those new country records were given in either of the supplements, and therefore the records reported there are undocumented. We have included the complete data for most of these new distributional records in an appendix at the end of this supplement.

4. List of museums cited by acronyms in this supplement:

CNCI: Canadian National Collection of Insects, Mites, and Arachnids, Ottawa, Ontario.
FMNH: Field Museum of Natural History, Chicago, Illinois.
FRIM: Forest Research Institute, Kepong, Malaysia.
IBSS: Institute of Biology and Soil Sciences, Vladivostok, Russia.
INBio: Instito Nacional de Biodiversidad, Heredia, Costa Rica.
IZAC: Institute of Zoology, Academia Sinica, Beijing, China.
MNHN: Museum National d'Historie Naturelle, Paris, France.
NHML: The Natural History Museum, London, England.
NHMW: Naturhistorisches Museum, Wien, Austria.
NMP: National Museum, Prague, Czech Republic.
SLWC: Stephen L.Wood Collection, Provo, Utah (soon to be transfered to USNM).
USNM: United States Museum of Natural History, Washington, D.C.
ZMLU: Museum of Zoology, Lund University, Lund, Sweden.

Bibliography

1. The bibliography at the end of this publication is a supplement to the bibliographies presented in Wood and Bright (1987, 1992) and Bright and Skidmore (1997). It contains references to literature dealing with all aspects of scolytid and platypodid taxonomy and biology published from 1995 to the end of 1999, plus references published prior to 1995 that were missed in the previous bibliographies. Several references dealing with new taxonomic or distributional information published in 2000 and 2001 are included in order to have the taxonomic information herein as complete as possible. References marked with an asterisk [*] either have not been seen as original articles or as abstracts, and the information contained therein is not included in the catalog section of this work; *or* the original article has not been seen but the abstract has, and the information gleaned from the abstract has been included. In this latter case, the author(s) name(s), the title, and (or) the journal name may not be correctly cited in the original language, since abstracting journals often ignore the diacritical marks in the original language. Articles that deal exclusively with forest pest conditions or similar survey reports are usually not included, but may be included if the article deals with conditions in countries other than the United States or Canada.

2. During the preparation of this supplement and bibliography, it was noted that many papers that may contain information relating to fossil or sub-fossil bark-beetles have been overlooked. These papers frequently do not include the name Scolytidae or Platypodidae in their titles or in the abstracts and are often published in nonentomological journals that are not reviewed by entomological abstracting services and are therefore missed by these services or indexes, and the journals are often not found in entomological libraries. The review publication "Studies in Quaternary Entomology, An inordinate fondness for insects" (edited by A.C. Ashworth, P.C. Buckland, and J.P. Sadler, published in Quaternary Proceedings 5, 1997) contains 30 papers, many of which contain references to many additional papers that refer to fossil and sub-fossil scolytids. Most of these references are not included herein, and the above publication should be consulted for further information.

3. While preparing a manuscript for another project, we found that numerous host plants were omitted from several species in the 1992 catalog. We have included these host records herein with the reference that reported the records. The complete reference is included in the bibliography with this supplement even though the reference is also included in the Wood and Bright bibliography published in 1987.

Host List

A host list similar to the ones in the 1992 catalog and Supplement 1 is included. It only includes hosts listed in this supplement and not previously reported in the 1992 catalog and Supplement 1.

New Synonymy Proposed in This Supplement

Prionosceles imitans Eggers, 1940, p. 136 (= *Scolytodes nitidissimus* (Eggers, 1940, p. 135)).

New Combinations Proposed in This Supplement

Webbia talaurica (Eggers), from *Arixyleborus*.

Replacement Names Proposed in This Supplement

Hypothenemus insulanus Bright, replacement name for *Hypothenemus pacificus* Bright and Peck 1998, not *H. pacificus* (Beeson) 1940.

Polygraphus yunnanensis Bright, replacement name for *P. querci* Yin and Huang 1996, not *P. querci* Wood 1988.

Unavailable Names

Chaetoptelius perrisine Apateler, cited in Öymen 1992:79,86. Species name and author name unknown to us. Evidently never validated, perhaps a *lapus calami*.

Conophthorus delriomorai Wood, cited in Rio Mora and Mayo J. 1988:54. Never validated.

D(endroctonus) pseudotsugae menziesii, cited in Safranyik 1995:155. Not a valid subspecific name, not validated.

Acknowledgements

We wish to acknowledge the hundreds of authors throughout the world that have contributed to the knowledge of the Scolytidae and Platypodidae. We especially thank those who sent us copies of their papers.

We thank Dr. Roger Beaver, Chiangmai, Thailand, for providing us with many corrections and for pointing out errors or omissions in the 1992 catalog and in Supplement 1. Mr. Miloš Kníňek, Forestry and Game Management Research Institute, Department of Forest Protection, Praha, Czech Republic, provided us with several important Russian and European references, in addition to research reports and symposium proceedings from IUFRO conferences, and offered valuable taxonomic advice. Dr. Robert Rabaglia, Maryland Department of Agriculture, Annapolis, Maryland, pointed out omissions in the distributions of several species and assisted by providing information and comments. Dr. Allison Bain, Postdoctoral Fellow, Center for Cultural and Environmental History, University of Massachusetts, Boston (currently at the Canadian National Collection of Insects, Research Branch, Agriculture and Agri-Food Canada, Ottawa, Ontario), provided valuable information and reprints concerning fossil and sub-fossil Scolytidae. Dr. Bruce Gill, Centre for Plant Quarantine Pests, Canadian Food Inspection Agency, Ottawa, Ontario, and Dr. Ales Smetana (retired), Research Branch, Agriculture and Agri-Food Canada, Ottawa, Ontario, reviewed a large portion of the manuscript and offered valuable suggestions.

We sincerely appreciate the assistance of Patricia Madaire and Steve Gamman of the Eastern Cereals and Oilseeds Research Centre Library, and Diane Thompson and Mike Graham of Interlibrary Loans, Canadian Agriculture Library, Agriculture and Agri-Food Canada, Ottawa, for making a special effort to search and obtain copies of numerous journal articles and books that were otherwise not available. This supplement could not have been completed without their efforts. We also thank the numerous unknown library workers in many libraries throughout the world for their efforts in locating and photocopying articles for our use. Their efforts enabled us to confirm the content of many papers that would otherwise have been listed in the bibliography as "not seen".

We also thank the anonymous reviewers of this work for their effort in reading through the entire manuscript and offering corrections and (or) suggestions. Their persistence is greatly appreciated.

Finally, we thank Diane Candler and Nancy Daly, National Research Council, Ottawa, for editing and preparation of the manuscript.

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Bright, D.E., and R.E. Skidmore. 1997. A Catalog of Scolytidae and Platypodidae (Coleoptera), Supplement 1 (1990–1994). NRC Research Press, Ottawa, Ontario. 368 pp.

Wood, S.L., and D.E. Bright. 1987. A catalog of Scolytidae and Platypodidae (Coleoptera), Part 1: Bibliography. Great Basin Naturalist Memoir 11. 685 pp.

Wood, S.L., and D.E. Bright. 1992. A catalog of Scolytidae and Platypodidae (Coleoptera), Part 2: Taxonomic Index Volume A and B. Great Basin Naturalist Memoir 13. 1553 pp.

Catalog of Scolytidae, Supplement 2

The following is a list of significant references that treat the entire family or major portions thereof. Included are references to symposium proceedings, keys, catalogs, and books in addition to references to other categories.

Page 28 **FAMILY SCOLYTIDAE LATREILLE.** Add:

KEYS: Krivolutskaya 1996a:316 (to East Russian genera); Paulin 1998:179 (to genera in Tahiti); Rykken & Hanson 1999 (to genera and species in northeastern United States); Voolma, Õunap, & Süda 1997b (to Estonian genera and species).

CATALOG: Romero Nápoles et al. 1997 (to Mexican genera and species).

GENERAL: Dajoz 1998:411–478.

REFERENCES: **(an)** Calder 1989, 1990; Carter 1999; Krivolutskaya 1996a:312; Lyal & King 1996; Michalski 1996; Normark, Jordal, & Farrell 1999; Page & Seybold 1998; Rykken & Hanson 1999; Seybold, Cognato, & Page 1998. **(bv)** Baier & Bader 1997; Borden 1990, 1995c, 1997; Dajoz 1998; Flanagan 1996; Francke et al. 1995; Führer, Lindenthal, & Baier 1997; Kirkendall, Kent, & Raffa 1997; Lyal & King 1996; Pena, Campos, & Sanchez-Raya 1998; Turchin & Simmons 1997. **(cn)** Babuder 1995; Behrendt, Blanchette, & Farrell 1995; Borden 1990, 1995a, 1995b, 1995c; Csoka 1997; Dippel 1995; Donaldson & Seybold 1998b; Dubbel et al. 1995; Eskew 1995; Faiman 1996; Fayt 1999; Ferraz et al. 1999; Flechtmann & Gaspareto 1997a; Forster 1998; Forester, Knížek, & Grodzki 1999; Frankel 1998; Führer 1996; Geils et al. 1995; González, Gazquez, & Pajares 1998; Goyer & Jones 1997; Goyer, Wagner, & Schowalter 1998; Gries 1995; Grodzki 1999a; Grodzki, Knížek, & Forster 1998; Haack, Poland, & Petrice 1999; Halambek et al. 1996; Hayes & Meeker 1996; Hayes et al. 1994, 1996a, 1996b; Heinrich 1997; Ho 1997; Hobson 1995; Hrašovec 1998; Hubbes 1999; Johnson 1995; Knížek & Zahradník 1999; Kytö, Niemelä, & Annila 1996; Lobinger 1995; Mordkovich & Kalyapin 1997; Mrkva 1998; Oliver 1997; Otsamo et al. 1999; Pfister 1999a; Phillips & Croteau 1999; Raffa & Smalley 1995; Rasmussen et al. 1996; Salom & Hobson 1995; Shea 1995; Steele, Lewinsohn, & Croteau 1995; Sukartana 1996a, 1996b; Sullivan, Saltmann, & Berisford 1999; Wulf 1998; Ye Hui & Bakke 1997. **(ds)** Grodzki 1997d; Hastings 1999; Kirkendall & Wood 2000; Lavoie, Elias, & Filion 1997:398. **(ec)** Brignolas et al. 1995; Dajoz 1998; Dippel 1995; Fayt 1999; Hedqvist 1998; Hubbes 1999; Kirschner & Oberwinkler 1998, 1999a; Kirschner, Bauer, & Oberwinkler 1999; Krokene & Solheim 1998a, 1998b; Kurtzman & Robnett 1998; McCullough, Werner, & Neumann 1998; Nakashima 1999; Õunap 1997, 1999; Paine, Raffa, & Harrington 1997; Six & Paine 1996a; Yamaoka 1999; Yang 1996. **(hb)** Dajoz 1998; Führer, Lindenthal, & Baier 1997; Kirkendall & Wood 2000; Kirkendall, Kent, & Raffa 1997; Krivolutskaya 1996a:312; Preisler & Akers 1995; Reeve, Ayers, & Lorio 1995; Rykken & Hanson 1999. **(ms)** Byers 1996a, 1996b, 1996c; Carrano M., Marques, & Pedrosa M. 1994; Carter 1999; Donaldson & Seybold 1998a; Kim et al. 1995; Poland &

Haack 1998. **(tx)** Beaver 1998c; Klimaszewski & Watt 1997; Krivolutskaya 1996a:312; Kuschel 1995; Lyal & King 1996; Marvaldi 1997; Page & Seybold 1998; Romero Nápoles et al. 1997; Rykken & Hanson 1999; Seybold, Cognato, & Page 1998; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 1997b.

Subfamily Hylesininae Erichson

TRIBE HYLASTINI

Genus **Scierus** LeConte

Page 29 ***annectans*** LeConte. Add:

DISTRIBUTION: NORTH AMERICA: UNITED STATES (Washington).

REFERENCES: **(ds)** Furniss & Johnson 1995:336. **(hb)** Furniss & Johnson 1995:336.

Genus **Hylurgops** LeConte

Page 29 **Hylurgops** LeConte. Add:

KEYS: Krivolutskaya 1996a:331 (to East Russian species); Voolma, Õunap, & Süda 1997b:20 (for Estonian species).

REFERENCES: **(tx)** Krivolutskaya 1996a:331; Voolma, Õunap, & Süda 1997b:20.

Page 30 ***batnensis*** (Brisout). Add:

REFERENCES: **(ds)** Öymen 1992.

Page 31 ***glabratus*** (Zetterstedt) Add:

FIGURES: Krivolutskaya 1996a:334 (outline).

DISTRIBUTION: ASIA: China (Heilongjiang). EUROPE: Estonia, Latvia.

HOSTS: *Picea jezoensis, P. koraiensis.*

REFERENCES: **(bv)** Kolomiets & Bogdanova 1998. **(cn)** Mihalciuc 1997; Simionescu 1995; Wermlinger et al. 1999. **(ds)** Holzschuh & Perny 1996:5; Kido & Azuma 1995; Krivolutskaya 1996a:331; Kulinich & Orlinskii 1998; Peltonen et al. 1998; Riba 1996; Sippola, Siitonen, & Kallio 1995; Telnov et al. 1997:133; Voolma & Süda 1999:190; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:20, 2000:38; Yanovskii 1999:329. **(ec)** Haidler, Wegensteiner, & Weiser 1998; Haidler et al. 1998; Hedqvist 1998:76; Jakuš 1995a, 1998b, 1998c; Kolomiets & Bogdanova 1998; Kula & Ząbecki 1999a, 1999b; Martikainen et al. 1999; Peltonen et al. 1998; Simionescu 1995; Wermlinger et al. 1999; Yang 1996. **(hb)** Klimetzek & Schlenstedt 1991; Martikinen et al. 1996; Peltonen & Heliövaara 1999. **(tx)** Krivolutskaya 1996a:331; Voolma, Õunap, & Süda 1997b:20; Yanovskii 1999:329.

Page 33 ***imitator*** (Reitter). Add:

REFERENCES: **(ds)** Krivolutskaya 1996a:332; Kulinich & Orlinskii 1998; Yanovskii 1999:329. **(tx)** Krivolutskaya 1996a:332; Yanovskii 1999:329.

Page 33 ***incomptus*** (Blandford). Add:

REFERENCES: **(cn)** Tkacz et al. 1998:18. **(ds)** Tkacz et al. 1998:18.

Page 34 ***interstitialis*** (Chapuis). Add:

FIGURES: Krivolutskaya 1996a:320 (apex of elytra).

REFERENCES: **(an)** Lyal & King 1996. **(bv)** Lyal & King 1996. **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:331; Kulinich & Orlinskii 1998; Yanovskii 1999:329. **(tx)** Krivolutskaya 1996a:331; Yanovskii 1999:329.

Page 34 ***longipennis*** (Blandford). Add:

REFERENCES: **(cn)** Tkacz et al. 1998:18. **(ds)** Tkacz et al. 1998:18.

Page 34 ***longipilus*** (Reitter). Add:

DISTRIBUTION: ASIA: China (Shaanxi).

HOSTS: *Pinus tabulaeformis*.

REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:331; Kulinich & Orlinskii 1998; Yanovskii 1999:329. **(ec)** Chen et al. 1999; Yang 1996. **(hb)** Chen et al. 1999. **(tx)** Krivolutskaya 1996a:331; Yanovskii 1999:329.

Page 35 ***major*** Eggers. Add:

FIGURES: Anonymous 1992a:632 (declivity).

DISTRIBUTION: ASIA: China (Hunan).

REFERENCES: **(ds)** Anonymous 1992a:632. **(ec)** Chen et al. 1999. **(hb)** Chen et al. 1999. **(tx)** Anonymous 1992a:632.

Page 35 ***palliatus*** (Gyllenhal). Add:

DISTRIBUTION: ASIA: Turkey. EUROPE: Estonia, Hungary, Latvia, Lithuania.

REFERENCES: **(bv)** Jakuš 1998a, 1998b, 1998c, 1998d; Mihalciuc, Mircioiu, & Bujila 1998; Peltonen, Heliövaara, & Väisänen 1997. **(cn)** Mihalciuc 1997; Mihalciuc, Mircioiu, & Bujila 1998; Simionescu 1995; Wermlinger et al. 1999. **(ds)** Gutowski & Kubisz 1995; Haack & Cavey 1997:5; Haack et al. 1997; Hansen, M. 1996:210; Hastings 1998; Kido & Azuma 1995; Krivolutskaya 1996a:332; Kulinich & Orlinskii 1998; Lakatos 1999c; Lombardero 1995:359,360; Peltonen et al. 1998; Podlussány 1998:303; Ponel 1995; Riba 1996; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:20, 2000:39; Whitehouse 1997a; Yanovskii 1999:329. **(ec)** Bakke 1996; Braasch, Metge, & Burgermeister 1999; Ehnström, Långström, & Hellqvist 1995; Haidler, Wegensteiner, & Weiser 1998; Haidler et al. 1998; Hedqvist 1998:76; Jakuš 1995a, 1998a, 1998b, 1998c; Kirschner & Oberwinkler 1998; Krokene & Solheim 1996; Kula & Ząbecki 1997b, 1999a, 1999b; Martikainen et al. 1999; Mokrzycki 1995a; Õunap 1999; Peltonen, Heliövaara,

& Väisänen 1997; Peltonen et al. 1998; Simionescu 1995; Wermelinger, Fecker, & Schneider-Mathis 1998; Wermlinger et al. 1999. (**hb**) Gutowski & Kubisz 1995; Klimetzek & Schlenstedt 1991; Peltonen & Heliövaara 1999; Peltonen, Heliövaara, & Väisänen 1997; Schroeder et al. 1999. (**tx**) Krivolutskaya 1996a:332; Voolma, Õunap, & Süda 1997b:20.

Page 38 *parvus* Eggers (synonym of ***palliatus*** Gyllenhal). Add:
REFERENCES: (**ds**) Kulinich & Orlinskii 1998.

Page 39 ***planirostris*** (Chapuis). Add:
REFERENCES: (**cn**) Tkacz et al. 1998:18. (**ds**) Tkacz et al. 1998:18; Yanovskii 1999:329.

Page 39 ***porosus*** (LeConte). Add:
REFERENCES: (**bv**) Safranyik, Linton, & Shore 1999; Safranyik, Shore, & Linton 1999. (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 40 ***reticulatus*** Wood. Add:
REFERENCES: (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 40 ***rugipennis*** (Mannerheim). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:56.

Page 40 ***rugipennis pinifex*** (Fitch). Add:
REFERENCES (**ds**) Bain 1999; Rykken & Hanson 1999:13. (**hb**) Rykken & Hanson 1999:13. (**tx**) Rykken & Hanson 1999:13.

Page 41 ***spessivtsevi*** Eggers. Add:
FIGURES: Krivolutskaya 1996a:320 (apex of elytra).
REFERENCES: (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a:332; Kulinich & Orlinskii 1998; Yanovskii 1999:330. (**tx**) Krivolutskaya 1996a:332; Yanovskii 1999:330.

Page 41 *modestus* Murayama (synonym of ***spessivtsevi*** Eggers). Add:
REFERENCES: (**ds**) Yanovskii 1999:329. (**tx**) Yanovskii 1999:329.

Page 41 *squamosus* Murayama (synonym of ***spessivtsevi*** Eggers). Add:
REFERENCES: (**ds**) Yanovskii 1999:330. (**tx**) Yanovskii 1999:330.

Page 42 ***subcostulatus*** (Mannerheim). Add:
REFERENCES: (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 42 ***subcostulatus alternans*** (Chapuis). Add:
FIGURES: Cibrián et al. 1995:339 (adult, gallery pattern).
HOSTS: *Pinus hartwegii, P. montezumae, P. pseudostrobus.*
REFERENCES: (**cn**) Cibrián et al. 1995:338; Tkacz et al. 1998:18. (**ds**) Cibrián et al. 1995:338. (**hb**) Cibrián et al. 1995:338.

Page 42 ***sulcatus*** Eggers. Add:
REFERENCES: (**ds**) Yanovskii 1999:330. (**tx**) Yanovskii 1999:330.

Genus **Hylastes** Erichson

Page 43 **Hylastes** Erichson. Add:
KEYS: Krivolutskaya 1996a:332 (to East Russian species); Voolma, Õunap, & Süda 1997b:20 (for Estonian species).
FIGURES: Cibrián et al. 1995:363 (adult, gallery pattern).
REFERENCES: **(cn)** Dajoz 1998:445; Heritage 1996, 1997; Heritage, Johnson, & Jennings 1997a, 1997b. **(ds)** Cibrián et al. 1995:362. **(hb)** Dajoz 1998:445; Heritage 1996. **(tx)** Beaver 1998c:185; Krivolutskaya 1996a:332; Voolma, Õunap, & Süda 1997b:20.

Add genus: *Ipsocossonus* Oke 1934:250. Type species: *Ipsocossonus anomalus* Oke, monotypic. Synonymy: Kuschel 1972:276.
NOTES: Omitted from 1992 catalog and 1997 supplement.
REFERENCES: **(tx)** Kuschel 1972:276; Beaver 1998c:185.

Page 44 ***angustatus*** (Herbst). Add:
DISTRIBUTION: EUROPE: Estonia, Hungary, Latvia.
REFERENCES: **(cn)** Atkinson 1997; Atkinson & de Laborde 1996. **(ds)** Hansen, M. 1996:210; Hastings 1998; Kulinich & Orlinskii 1998; Lombardero 1995:359,360; Öymen 1992; Podlussány 1998:303; Riba 1996; Telnov et al. 1997:133; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 1997b:20, 2000:41. **(ec)** de Beer, Zhou, & Wingfield 1999; Hedqvist 1998:77. **(tx)** Voolma, Õunap, & Süda 1997b:20.

Page 45 ***angusticollis*** Eggers. Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998.

Page 45 ***ater*** (Paykull). Add:
FIGURES: Bruge 1998; Dajoz 1998:413 (habitus); Voolma, Õunap, & Süda 1997b:20 (frons).
DISTRIBUTION: EUROPE: Latvia.
HOSTS: *Pinus uncinata*.
REFERENCES: **(ds)** Bruge 1998; Haack & Cavey 1997:5; Haack et al. 1997; Hansen, M. 1996:210; Hansen, M. et al. 1996:270; Hastings 1998; Kulinich & Orlinskii 1998; Lakatos 1999c; Lombardero 1995:359,360; Osborne 1997; Öymen 1992; Riba 1996; Ponel 1995; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1997b:21; Whitehouse 1997a; Yanovskii 1999:330. **(ec)** Dick 1998; Hedqvist 1998:76; Mokrzycki 1995a. **(tx)** Beaver 1998c:185; Bruge 1998; Voolma, Õunap, & Süda 1997b:21; Yanovskii 1999:330.

anomalus Oke 1934:251. Holotype (sex?); Victoria: Violet Town; Oke Collection (not located). Synonymy: Kuschel 1972:276.
NOTES: Omitted from 1992 catalog and 1997 supplement.
REFERENCES: **(tx)** Kuschel 1972:276; Beaver 1998c:185.

Page 49 ***attenuatus*** Erichson. Add:
FIGURES: Dajoz 1998:413 (habitus); Voolma, Õunap, & Süda 1997b:20 (frons).
DISTRIBUTION: EUROPE: Estonia, Italy, Latvia.

REFERENCES: **(cn)** Wermlinger et al. 1999. **(ds)** Bordoni 1995; Hastings 1998; Kulinich & Orlinskii 1998; Lombardero 1995:359,360; Öymen 1992; Riba 1996; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:21, 2000:40; Voolma & Süda 1999:189; Whitehead 1997; Whitehouse 1997a. **(ec)** Bakke 1996; Hedqvist 1998:77; Wermlinger et al. 1999. **(tx)** Voolma, Õunap, & Süda 1997b:21.

Page 50 ***brunneus*** Erichson. Add:
FIGURES: Bruge 1998.
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: **(bv)** Brattli, Anderson, & Nilssen 1998. **(ds)** Bruge 1996, 1998; Hansen, M. 1996:210; Hansen, M., Pedersen, & Pritzl 1999:100; Krivolutskaya 1996a:332; Kulinich & Orlinskii 1998; Osborne 1997; Peltonen et al. 1998; Sippola, Siitonen, & Kallio 1995; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1996:129, 1997b:20, 2000:39; Whitehouse 1997a; Yanovskii 1999:330. **(ec)** Bakke 1996; Hedqvist 1998:76; Martikainen et al. 1999; Peltonen et al. 1998. **(hb)** Martikinen et al. 1996. **(tx)** Bruge 1998; Krivolutskaya 1996a:332; Voolma, Õunap, & Süda 1997b:20; Yanovskii 1999:330.

Page 51 ***cunicularius*** Erichson. Add:
FIGURES: Bruge 1998.
DISTRIBUTION: ASIA: Turkey. EUROPE: Estonia, Finland, Latvia.
REFERENCES: **(cn)** Wermlinger et al. 1999; Zahradník et al. 1995:13. **(ds)** Bruge 1998; Gutowski & Kubisz 1995; Hansen, M. 1996:210; Hansen, M. et al. 1997:92; Kido & Azuma 1995; Krivolutskaya 1996a: 332; Kulinich & Orlinskii 1998; Öymen 1992; Peltonen et al. 1998; Sippola, Siitonen, & Kallio 1995; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:20, 2000:40; Yanovskii 1999:330. **(ec)** Bakke 1996; Haidler, Wegensteiner, & Weiser 1998; Haidler et al. 1998; Hedqvist 1998:76; Jakuš 1995a; Kula & Ząbecki 1999a; Martikainen et al. 1999; Peltonen et al. 1998; Wermlinger & v. Hirschheydt 1996; Wermlinger et al. 1999; Weslien & Schroeder 1999. **(hb)** Gutowski & Kubisz 1995; Wermlinger & v. Hirschheydt 1996. **(tx)** Bruge 1998; Krivolutskaya 1996a:332; Voolma, Õunap, & Süda 1997b:20; Yanovskii 1999:330.

Page 53 ***starki*** Eggers (synonym of ***cunicularius*** Erichson). Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1997b:20. **(tx)** Voolma, Õunap, & Süda 1997b:20.

Page 54 ***gracilis*** LeConte. Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 55 ***linearis*** Erichson. Add:
REFERENCES: **(ds)** Hastings 1998; Lombardero 1995:359; Öymen 1992; Riba 1996.

Page 56 ***longicollis*** Swaine. Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 56 ***macer*** LeConte. Add:

REFERENCES: **(ec)** Otrosina & Farrell 1995. **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 57 ***nigrinus*** (Mannerheim). Add:

REFERENCES: **(bv)** Kelsey & Joseph 1998; Skillen et al. 1997:52. **(ec)** Kelsey & Joseph 1998; Otrosina & Farrell 1995. **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 57 ***opacus*** Erichson. Add:

DISTRIBUTION: EUROPE: Estonia, Hungary, Italy (Calabria-Sila Piccola, Cinipetta), Latvia. NORTH AMERICA: United States (Connecticut, Maine, New Hampshire, New York, Ohio, Pennsylvania, Vermont, West Virginia).

REFERENCES: **(cn)** Bridges 1995; Wermlinger et al. 1999. **(ds)** Hansen, M. 1996:210; Hansen, M. et al. 1996:270, 1997:147, 1998:92; Kido & Azuma 1995; Krivolutskaya 1996a:333; Kulinich & Orlinskii 1998; LaGasa, Furniss, & Kamping 1997; Lakatos 1999c; Podlussány 1998: 303; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:21, 2000:41; Whitehouse 1997a; Yanovskii 1999:331. **(ec)** Bakke 1996; Hedqvist 1998:77; Martikainen et al. 1999; Mokrzycki 1995a; Wermlinger et al. 1999. **(tx)** Krivolutskaya 1996a:333; Voolma, Õunap, & Süda 1997b:21; Yanovskii 1999:331.

Page 59 ***parallelus*** Chapuis. Add:

HOSTS: *Pinus armandi.*

REFERENCES: **(ds)** Yanovskii 1999:331. **(ec)** Chen et al. 1999. **(hb)** Chen et al. 1999. **(tx)** Yanovskii 1999:331.

Page 59 ***plumbeus*** Blandford. Add:

FIGURES: Krivolutskaya 1996a:333 (outline).

REFERENCES: **(ds)** Krivolutskaya 1996a:333; Kulinich & Orlinskii 1998. **(tx)** Krivolutskaya 1996a:333.

Page 60 *fushunensis* Murayama (synonym of ***plumbeus*** Blandford). Add:

REFERENCES: **(ds)** Yanovskii 1999:329. **(tx)** Yanovskii 1999:329.

Page 60 *obscurus* Chapuis (synonym of ***plumbeus*** Blandford). Add:

REFERENCES: **(ds)** Yanovskii 1999:330. **(tx)** Yanovskii 1999:330.

Page 60 ***porculus*** Erichson. Add:

REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(cn)** Klepzig, Smalley, & Raffa 1996. **(ds)** Peck & Thomas 1998:157; Rykken & Hanson 1999:14. **(ec)** Klepzig, Smalley, & Raffa 1995, 1996. **(hb)** Rykken & Hanson 1999:14. **(tx)** Rykken & Hanson 1999:14.

Page 61 ***ruber*** Swaine. Add:

REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 61 ***salebrosus*** Eichhoff. Add:

REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999; Skillen et al. 1997:53. **(ds)** Peck & Thomas 1998:157.

Page 61 *scobinosus* Eichhoff (synonym of ***salebrosus*** Eichhoff). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:157.

Page 62 ***techangensis*** Tsai & Huang. Add:
REFERENCES: **(ec)** Chen et al. 1999. **(hb)** Chen et al. 1999.

Page 62 ***tenuis*** Eichhoff. Add:
REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(ds)** Peck & Thomas 1998:157. **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

TRIBE HYLESININI

Genus **Hylastinus** Bedel

Page 64 **Hylastinus** Bedel. Add:
REFERENCES: **(tx)** Voolma, Õunap, & Süda 1997b:22.

Page 64 ***obscurus*** (Marsham). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:15 (lateral habitus).
DISTRIBUTION: EUROPE: Italy, Latvia.
REFERENCES: **(cn)** Steiner & Alderman 1999. **(ds)** Bordoni 1995:43; Hansen, M. 1996:210; Hansen, M., Pedersen, & Pritzl 1999:100; Hansen, M. et al. 1996:270, 1997:147; Hastings 1998; Lombardero 1995:366; Ponel 1997; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1997b:22; Whitehouse 1997b. **(ec)** Hedqvist 1998:76. **(tx)** Voolma, Õunap, & Süda 1997b:22.

Genus **Kissophagus** Chapuis

Page 68 ***hederae*** (Schmidt). Add:
DISTRIBUTION: EUROPE: Belgium.
REFERENCES: **(ds)** Deledicque 1998; Dinnin 1997; Lombardero 1995:366; Öymen 1992; Ponel 1995; Riba 1996.

Page 69 ***novaki*** Reitter. Add:
HOSTS: *Cedrus atlantica*.
REFERENCES: **(ds)** Benhalima et al. 1999.

Page 69 ***nuesslini*** Reitter. Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: **(ds)** Öymen 1992.

Genus **Pteleobius** Bedel

Page 69 **Pteleobius** Bedel. Add:
REFERENCES: **(tx)** Voolma, Õunap, & Süda 1997b:22.

Page 69 ***kraatzi*** (Eichhoff). Add:
FIGURES: Dajoz 1998:417 (gallery pattern).

REFERENCES: **(ds)** Lombardero 1995:364; Öymen 1992.

Page 70 ***vittatus*** (Fabricius). Add:
FIGURES: Lombardero 1995:364 (gallery pattern); Voolma, Õunap, & Süda 1997b:15 (habitus).
DISTRIBUTION: EUROPE: Latvia, Ukraine.
REFERENCES: **(ds)** Dajoz 1998; Khaustov 1998b; Öymen 1992; Podlussány 1998:303; Riba 1996; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1997b:22. **(ec)** Khaustov 1998b. **(tx)** Voolma, Õunap, & Süda 1997b:22.

Genus **Alniphagus** Swaine

Page 73 **Alniphagus** Swaine. Add:
REFERENCES: **(tx)** Krivolutskaya 1996a:336.

Page 73 ***alni*** (Niisima). Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:336; Yanovskii 1999:331. **(tx)** Krivolutskaya 1996a:336; Yanovskii 1999:331.

Genus **Hylesinus** Fabricius

Page 74 **Hylesinus** Fabricius. Add:
KEYS: Krivolutskaya 1996a:333 (to East Russian species); Õunap 1996 (to Estonian species); Voolma, Õunap, & Süda 1997b:22 (to Estonian species).
REFERENCES: **(tx)** Krivolutskaya 1996a:333; Voolma, Õunap, & Süda 1997b:22.

Page 74 ***aculeatus*** Say. Add:
DISTRIBUTION: NORTH AMERICA: Canada (Alberta).
REFERENCES: **(ds)** Bain 1999; Hiratsuka, Langor, & Crane 1995:211; Katovich & Ostry 1998:102; Rykken & Hanson 1999:15. **(hb)** Hiratsuka, Langor, & Crane 1995:211; Rykken & Hanson 1999:15. **(tx)** Rykken & Hanson 1999:15.

Page 75 ***aztecus*** Wood. Add:
FIGURES: Cibrián et al. 1995:319 (adult, life history), 321 (adult, damage, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Distrito Federal, Hidalgo, Michoacán, Puebla, Querétaro).
REFERENCES: **(cn)** Cibrián et al. 1995:318,320. **(ds)** Cibrián et al. 1995:318,320. **(hb)** Cibrián et al. 1995:318,320.

Page 76 ***californicus*** (Swaine). Add:
FIGURES: Hiratsuka, Langor, & Crane 1995:210 (habitus, gallery pattern, injury).
DISTRIBUTION: NORTH AMERICA: Canada (Alberta), United States (Washington).

REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**cn**) Hiratsuka, Langor, & Crane 1995:211. (**ds**) Furniss & Johnson 1995:336; Hiratsuka, Langor, & Crane 1995:211. (**hb**) Furniss & Johnson 1995:336; Hiratsuka, Langor, & Crane 1995:211; Kirkendall, Kent, & Raffa 1997.

Page 76 ***cholodkovskyi*** Berger. Add:
REFERENCES: (**ds**) Krivolutskaya 1996a:335; Yanovskii 1999:331. (**tx**) Krivolutskaya 1996a:335; Yanovskii 1999:331.

Page 77 ***cingulatus*** Blandford. Add:
FIGURES: Krivolutskaya 1996a:333 (habitus).
REFERENCES: (**ds**) Krivolutskaya 1996a:333; Yanovskii 1999:331. (**tx**) Krivolutskaya 1996a:333; Yanovskii 1999:331.

Page 77 ***costatus*** Blandford. Add:
REFERENCES: (**ds**) Krivolutskaya 1996a:333; Yanovskii 1999:331. (**tx**) Krivolutskaya 1996a:333; Yanovskii 1999:331.

Page 77 ***crenatus*** (Fabricius). Add:
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: (**cn**) Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník et al. 1995:7. (**ds**) Hansen, M. 1996:210; Hansen, M. et al. 1997:92; Konca 1995; Osborne 1996:187; Öymen 1992; Riba 1996; Roper & Whitehouse 1997; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:22, 2000:42. (**ec**) Hedqvist 1998:76; Õunap 1999. (**tx**) Õunap 1996; Voolma, Õunap, & Süda 1997b:22.

Page 79 ***criddlei*** (Swaine). Add:
DISTRIBUTION: NORTH AMERICA: Canada (Alberta).
REFERENCES: (**ds**) Hiratsuka, Langor, & Crane 1995:211. (**hb**) Hiratsuka, Langor, & Crane 1995:211.

Page 79 ***elatus*** Niisima. Add:
FIGURES: Krivolutskaya 1996a:333 (habitus).
REFERENCES: (**ds**) Krivolutskaya 1996a:333; Yanovskii 1999:331. (**tx**) Krivolutskaya 1996a:333; Yanovskii 1999:331.

Page 80 ***eos*** Spessivtsev. Add:
FIGURES: Krivolutskaya 1996a:333 (habitus).
REFERENCES: (**ds**) Krivolutskaya 1996a:333; Yanovskii 1999:331. (**tx**) Krivolutskaya 1996a:333; Yanovskii 1999:331.

Page 80 ***laticollis*** Blandford. Add *lubarskii* as a synonym. Add:
FIGURES: Krivolutskaya 1996a:335 (habitus).
REFERENCES: (**ds**) Krivolutskaya 1996a:335; Yanovskii 1999:331. (**tx**) Krivolutskaya 1996a:335; Yanovskii 1999:331.

Page 81 *striatus* Eggers (synonym of ***laticollis*** Blandford). Add:
NOTES: Recognized as distinct species by Krivolutskaya 1996a:335.
REFERENCES: (**ds**) Krivolutskaya 1996a:335; Yanovskii 1999:332. (**tx**) Krivolutskaya 1996a:335; Yanovskii 1999:332.

Page 81 *lubarskii* Stark. Move to ***laticollis*** as a synonym. Add:
SYNONYMY: Krivolutskaya 1996a:335.
REFERENCES: **(ds)** Yanovskii 1999:332. **(tx)** Yanovskii 1999:332.

Page 81 ***mandshuricus*** Eggers. Add:
REFERENCES: **(ds)** Yanovskii 1999:332. **(tx)** Yanovskii 1999:332.

Page 82 ***nobilis*** Blandford. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:335; Yanovskii 1999:332. **(tx)** Krivolutskaya 1996a:335; Yanovskii 1999:332.

Page 82 ***oregonus*** (Blackman). Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: **(ds)** LaGasa, Furniss, & Kamping 1997:4.

Page 82 ***orni*** Fuchs. Add:
DISTRIBUTION: EUROPE: Spain.
REFERENCES: **(cn)** Dajoz 1998:441. **(ds)** Beaver 1999d:182; Riba 1996.

Page 83 ***pravdini*** Stark. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:336; Yanovskii 1999:332. **(tx)** Krivolutskaya 1996a:336; Yanovskii 1999:332.

Page 83 ***shabliovskyi*** Kurenzov. Add:
FIGURES: Krivolutskaya 1996a:333 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:333; Yanovskii 1999:332. **(tx)** Krivolutskaya 1996a:333; Yanovskii 1999:332.

Page 83 ***toranio*** (Danthione). Add:
DISTRIBUTION: SOUTH AMERICA: Peru (introduced).
REFERENCES: **(ds)** Öymen 1992; Riba 1996.

Page 83 *oleiperda* (synonym of ***toranio*** (Danthione)). Add:
REFERENCES: **(cn)** Canales & Valdivieso 1999. **(ds)** Dinnin 1997; Hansen, M. 1996:210; Ponel 1995; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1997b:22; Whitehead 1997. **(ec)** Hedqvist 1998:76. **(tx)** Õunap 1996; Voolma, Õunap, & Süda 1997b:22.

Page 85 ***varius*** (Fabricius). Add:
FIGURES: Lombardero 1995:367 (gallery pattern).
DISTRIBUTION: ASIA: China (Heilongjiang, Shaanxi), Iran (Ghom). EUROPE: Estonia, Latvia.
HOSTS: *Fraxinus mandshurica*.
REFERENCES: **(bv)** Borden 1997; Loyning & Kirkendall 1999. **(cn)** Borden 1997. **(ds)** Borumand 1998:91; Dinnin 1997; Hansen, M. 1996: 210; Hansen, M. et al. 1996:270, 1997:147, 1998:92; Kenward & Hall 1995; Lombardero 1995:367; Öymen 1992; Ponel 1995, 1997; Riba 1996; Robinson 1996; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:23, 2000:43; Voolma, Süda, & Õunap 1998:75. **(ec)** Hansen, M. 1996:210; Hedqvist 1998:76; Lozano,

Guerra, & Campos 1999; Lozano et al. 1999; Wermlinger & v. Hirschheydt 1996. **(hb)** Hansen, M. 1996:210; Lozano & Campos 1996. **(tx)** Õunap 1996; Wermlinger & v. Hirschheydt 1996; Voolma, Õunap, & Süda 1997b:22.

Page 86 *fraxini* Panzer (synonym of ***varius*** (Fabricius)). Add:

FIGURES: Dajoz 1998:417 (gallery pattern).

REFERENCES: **(cn)** Dajoz 1998:441; Kolk & Sierpiński 1999; Wermlinger et al. 1999; Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník et al. 1995:7. **(ds)** Hansen, M. 1996:210; Hastings 1998; Osborne 1997; Telnov et al. 1997:133; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:22, 2000:42. **(ec)** Hedqvist 1998:76; Khaustov 1999; Õunap 1999; Wermlinger et al. 1999. **(tx)** Õunap 1996; Voolma, Õunap, & Süda 1997b:22.

Genus **Ficicis** Lea

Page 91 *insularum* Beeson (synonym of ***despectus*** (Walker)). Add:

REFERENCES: **(ds)** Paulin 1998:181.

Page 91 ***javanus*** (Eggers). Add:

REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Genus **Hylesinopsis** Eggers

Page 92 *acacicolens* Wood. Add:

NOTES: Unjustified replacement name for *Alniphagus africanus* Schedl 1963, not Eggers 1933.

REFERENCES: **(tx)** Beaver 1998c:180.

Page 93 ***ater*** (Nunberg). Add:

REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:59.

Page 93 ***decellei*** (Nunberg). Add:

REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:59.

Page 94 ***ericius*** (Schaufuss). Delete entire entry. Species correctly listed on page 203 in the 1992 catalog.

REFERENCES: **(ms)** Beaver 1998c:185.

Page 95 *secutus* Wood. Add:

NOTES: Unjustified replacement name for *Hylesinus africanus* Schedl 1965, not Eggers 1933.

REFERENCES: **(tx)** Beaver 1998c:181.

Add species: ***kenyae*** Wood. Add:

NOTES: (1) Justified replacement name for *Alniphagus africanus* Schedl 1963, not Eggers 1933. (2) Omitted from 1992 catalog and 1997 supplement.

REFERENCES: **(tx)** Beaver 1998c:180.

ugandae Wood. Add:
NOTES: (1) Justified replacement name for *Hylesinus africanus* Schedl 1965, not Eggers 1933. (2) Omitted from 1992 catalog and 1997 supplement.
REFERENCES: **(tx)** Beaver 1998c:180.

Genus **Rhopalopselion** Hagedorn

Page 96 ***dentatum*** Nunberg. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

Genus **Phloeoborus** Erichson

Page 98 ***bodei*** Eggers. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

Page 100 ***rudis*** Erichson. Add:
HOSTS: *Arecastrum romanzoffianum* var. *australe* (Viana 1964:128).

Page 100 *rugipennis* Eggers (synonym of ***rudis*** Erichson). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

TRIBE TOMICINI

Genus **Chaetoptelius** Fuchs

Page 104 ***vestitus*** (Mulsant & Rey). Add:
DISTRIBUTION: ASIA: Iran (Semn n).
REFERENCES: **(bv)** Lababidi 1998. **(cn)** Greco & Nucifora 1999; Lababidi 1999; Mourikis, Tsourgianni, & Chitzandis 1998. **(ds)** Alekseev 1995; Borumand 1998:92; Öymen 1992. **(ec)** Alekseev 1995; Lababidi 1998. **(hb)** Lababidi 1998; Mourikis, Tsourgianni, & Chitzandis 1998.

Genus **Xylechinosomus** Schedl

Page 105 ***brasiliensis*** (Schedl). Add:
HOSTS: *Araucaria angustifolia.*
REFERENCES: **(ds)** Borges 1990:203.

Page 105 ***contractus*** (Chapuis). Add:
REFERENCES: **(ds)** Borges 1990:203.

Page 105 ***hirsutus*** (Schedl). Add:
HOSTS: *Araucaria angustifolia.*
REFERENCES: **(ds)** Borges 1990:203.

Page 105 ***minimus*** Schedl. Add:
REFERENCES: **(ds)** Borges 1990:203.

Page 105 ***valdivianus*** (Eggers). Add:
REFERENCES: **(ds)** Morrone 1997:12.

Genus **Sinophloeus** Brethes

Page 105 ***porteri*** Brethes. Add:
REFERENCES: **(ds)** Morrone 1997:12.

Genus **Dendrotrupes** Broun

Page 106 ***costiceps*** Broun. Add:
DISTRIBUTION: OCEANIA: Chatham Islands.
REFERENCES: **(ds)** Emberson 1998:55.

Genus **Hylurgopinus** Swaine

Page 106 ***rufipes*** (Eichhoff). Add:
FIGURES: Hiratsuka, Langor, & Crane 1995:213 (habitus, gallery pattern, injury).
REFERENCES: **(bv)** Skillen et al. 1997:54. **(cn)** Jin 1998a, 1998b; Pines & Westwood 1996. **(ds)** Anonymous 1994e:52, 1995a:49, 1996a:45; Bain 1998:39; Hiratsuka, Langor, & Crane 1995:213; Safranyik 1995. **(hb)** Dunn 1996:193; Hiratsuka, Langor, & Crane 1995:213; Pines & Westwood 1995. **(tx)** Dunn 1996:193.

Genus **Pseudohylesinus** Swaine

Page 109 ***dispar*** Blackman. Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 109 ***granulatus*** (LeConte). Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 110 ***magnus*** Wood. Add:
REFERENCES: **(cn)** Tkacz et al. 1998:21,38. **(ds)** Tkacz et al. 1998:21,38. **(hb)** Tkacz et al. 1998:21,38.

Page 110 ***nebulosus*** (LeConte). Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: **(ds)** Öymen 1992. **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 114 ***variegatus*** (Blandford). Add:
FIGURES: Cibrián et al. 1995:327 (damage, gallery pattern, life stages), 329 (adult, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Jalisco, Puebla).
HOSTS: *Abies vajarii*.

REFERENCES: **(cn)** Cibrián et al. 1995:326; Tkacz et al. 1998:21,38. **(ds)** Cibrián et al. 1995:326; Tkacz et al. 1998:21,38. **(hb)** Cibrián et al. 1995:326; Tkacz et al. 1998:21,38.

Genus **Pseudoxylechinus** Wood & Huang

Page 114 **Pseudoxylechinus** Wood & Huang. Add:
KEYS: Chen & Yin 2001:337.

Add species: **piceae** Chen & Yin 2001:336. Holotype (♂), P. R. China: "Yunnan Province at the Nanhai (113.2°N, 23.1°E), Guangdong", IZAC.
FIGURES: Chen & Yin 2001:337 (habitus, antenna, fore tibia, proventricular plate).
DISTRIBUTION: ASIA: China (Yunnan).
HOSTS: *Picea asperata*.
REFERENCES: **(tx)** Chen & Yin 2001:336.

Genus **Xylechinus** Chapuis

Page 114 **Xylechinus** Chapuis. Add:
KEYS: Krivolutskaya 1996a:336 (to East Russian species).
REFERENCES: **(ds)** Krivolutskaya 1996a:336. **(tx)** Krivolutskaya 1996a:336; Voolma, Õunap, & Süda 1997b:23.

Page 115 ***bergeri*** Spessivtsev. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:336; Yanovskii 1999:332. **(tx)** Krivolutskaya 1996a:336; Voolma, Õunap, & Süda 1997b:23; Yanovskii 1999:332.

Page 115 ***fuliginosus*** Blandford. Add:
DISTRIBUTION: NORTH AMERICA: **Guatemala** (Quetzaltenango), Mexico (**Oaxaca**) (see Appendix).

Page 116 ***imperialis*** (Schedl). Add:
HOSTS: *Parkinsonia aculeata* (Viana 1964:127).

Page 117 ***pilosus*** (Ratzeburg). Add:
FIGURES: Krivolutskaya 1996a:336 (habitus); Voolma, Õunap, & Süda 1997b:16 (habitus).
DISTRIBUTION: EUROPE: Estonia, Finland, Latvia.
REFERENCES: **(bv)** Jakuš 1998a, 1998b, 1998c; Jakuš & Dudova 1999; Peltonen, Heliövaara, & Väisänen 1997. **(cn)** Jakuš & Dudova 1999; Kulinich & Orlinskii 1998; Wermlinger et al. 1999. **(ds)** Hansen, M. 1996:210; Holzschuh & Perny 1996:5; Kido & Azuma 1995; Krivolutskaya 1996a:336; Peltonen et al. 1998; Sippola, Siitonen, & Kallio 1995; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:126, 1997a:21, 1997b:23, 2000:43; Yanovskii 1999:332. **(ec)** Hedqvist 1998:76; Jakuš 1995a, 1998a, 1998b, 1998c; Kula & Ząbecki 1999a, 1999b; Martikainen et al. 1999; Peltonen & Heliövaara 1998; Peltonen,

Heliövaara, & Väisänen 1997; Peltonen et al. 1998; Wermlinger et al. 1999. **(hb)** Klimetzek & Schlenstedt 1991; Peltonen, Heliövaara, & Väisänen 1997. **(tx)** Krivolutskaya 1996a:336; Voolma, Õunap, & Süda 1997b:23; Yanovskii 1999:332.

Genus **Hylurgus** Latreille

Page 119 **Hylurgus** Latreille. Add:

REFERENCES: **(tx)** Krivolutskaya 1996a:337; Voolma, Õunap, & Süda 1997b:23.

Page 119 ***ligniperda*** (Fabricius). Add:

FIGURES: Calder 1989:1261 (alimentary canal), 1265 (central nervous system), 1990:499 (♂ reproductive system); Dajoz 1998:413 (habitus); Voolma, Õunap, & Süda 1997b:15 (dorsal outline).

DISTRIBUTION: EUROPE: Estonia, Italy, Latvia.

REFERENCES: **(an)** Angulo 1996. **(ds)** Bordoni 1995:43; Haack & Cavey 1997:5; Haack et al. 1997; Hansen, M. 1996:210; Hastings 1998; Krivolutskaya 1996a:337; Kulinich & Orlinskii 1998; Lakatos 1999c; Lindelöw 1998b; Lombardero 1995:359,360; Öymen 1992; Podlussány 1998:303; Riba 1996; Telnov et al. 1997:134; Voolma & Mandelshtam 1998; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:23, 2000:44; Voolma, Süda, & Õunap 1998:76; Yanovskii 1999:333. **(ec)** de Beer, Zhou, & Wingfield 1999; Dick 1998; Hedqvist 1998:76; Mokrzycki 1995a. **(hb)** Markalas & Kalapanida 1997. **(tx)** Krivolutskaya 1996a:337; Voolma, Õunap, & Süda 1997b:23; Yanovskii 1999:333.

Page 122 ***micklitzi*** Wachtl. Add:

DISTRIBUTION: Europe: Spain.

REFERENCES: **(ds)** Öymen 1992; Riba 1996.

Genus **Tomicus** Latreille

Page 122 **Tomicus** Latreille. Add:

KEYS: Krivolutskaya 1996a:336 (to East Russian species); Voolma, Õunap, & Süda 1997b:23 (to Estonian species).

REFERENCES: **(cn)** Zahn 1999. **(ds)** Dajoz 1998:441. **(tx)** Krivolutskaya 1996a:336; Voolma, Õunap, & Süda 1997b:23.

Page 123 ***brevipilosus*** (Eggers). Add:

REFERENCES: **(ds)** Yanovskii 1999:333. **(tx)** Yanovskii 1999:333.

Page 123 ***destruens*** (Wollaston). Add:

HOSTS: *Pinus halepensis, P. pinea.*

REFERENCES: **(an)** Galián & Gallego 2000. **(bv)** Guerrero et al. 1997; Monleón, Blas, & Riba 1996. **(cn)** Nanni & Tiberi 1997. **(ds)** Riba 1996. **(ec)** Nanni & Tiberi 1997. **(hb)** Monleóon, Blas, & Riba 1996. **(tx)** Galián & Gallego 2000.

Page 123 ***minor*** (Hartig). Add:

FIGURES: Anonymous 1992a:632 (declivity); Krivolutskaya 1996a:336 (apex of elytra); Lombardero 1995:360 (gallery pattern); Voolma, Õunap, & Süda 1997b:23 (declivity).

DISTRIBUTION: ASIA: China (Gansu, Heilongjiang, Hunan, Shaanxi). EUROPE: Estonia, Latvia.

HOSTS: *Pinus koraiensis, P. tabulaeformis.*

REFERENCES: **(an)** Fernández, Salgado, & Pajares 1999. **(bv)** Knížek 1998a; Lieutier, Vouland, & Pettinetti 1997; Markalas 1997; Rigling & Cherubini 1999. **(cn)** Annila et al. 1999; Bogdanova 1998; Cech & Krehan 1997; Grodzki, Kolk, & Stocki 1997; Knížek 1998a; Knížek & Zahradník 1999; Kolk & Sierpiński 1999; Leontovyč, Turčani, & Zúbrik 1999; Mihalache, Mihalciuc, & Ciornei 1997; Tomiczek & Krehan 1999; Tsankov, Mirchev, & Tomovsky 1999; Turčani 1998; Wermlinger et al. 1999; Ye Hui 1999; Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník & Šrůtka 1997; Zahradník et al. 1995:6; Zolubas 1999. **(ds)** Anonymous 1992a:632; Eronen, Hyvarinen, & Zetterberg 1999; Gutowski & Kubisz 1995; Hansen, M. 1996:211; Hansen, M. et al. 1996: 270; Kido & Azuma 1995; Krivolutskaya 1996a:337; Kulinich & Orlinskii 1998; Lombardero 1995:360; Markalas 1997:59; Öymen 1992; Riba 1996; Šrůtka, Liška, & Kapitola 1998; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 2000:44; Whitehouse 1997a; Yanovskii 1999:333. **(ec)** Arefjew 1999; Bakke 1996; Bogdanova 1998; Hedqvist 1998:76; Knížek 1998a; Martikainen et al. 1999; Mokrzycki 1995a; Õunap 1999; Wermlinger et al. 1999; Yang 1996. **(hb)** Fernández, Pajares, & Salgado 1999a, 1999b; Gutowski & Kubisz 1995; Knížek 1998a; Tsankov, Mirchev, & Tomovsky 1999; Ye Hui & Xue-Song 1999. **(tx)** Anonymous 1992a:632; Knížek 1998a; Krivolutskaya 1996a:337; Yanovskii 1999:333.

Page 128 ***pilifer*** (Spessivtsev). Add:

DISTRIBUTION: ASIA: China (Heilongjiang).

HOSTS: *Pinus koraiensis.*

REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:337; Kulinich & Orlinskii 1998; Yanovskii 1999:333. **(ec)** Yang 1996. **(tx)** Krivolutskaya 1996a:337; Yanovskii 1999:333.

Page 128 ***piniperda*** (Linnaeus). Add:

FIGURES: Anonymous 1992a:632 (declivity); Dajoz 1998:442 (gallery pattern); Krivolutskaya 1996a:337 (apex of elytra); Voolma, Õunap, & Süda 1997b:23 (declivity).

DISTRIBUTION: ASIA: China (Guizhou, Heilongjiang, Hunan, Shaanxi, Yunnan). EUROPE: Estonia, Hungary, Latvia.

HOSTS: *Pinus armandi, P. koraiensis, P. yunnanensis.*

REFERENCES: **(an)** Annila et al. 1999; Carter et al. 1996; Galián & Gallego 2000. **(bv)** Borg-Karlson et al. 1999; Brattli, Anderson, & Nilssen 1998; Bright 1996; Czokajlo & Teale 1999; Fernández & Salgado 1999; Haack & Lawrence 1995a, 1997a; Kauffman, Waltz, & Cummings 1998; Knížek 1998a; Kolomiets & Bogdanova 1998; Långström, Hellqvist, & Ehnström 1999; Lawrence & Haack 1995; Lieutier, Vouland,

& Pettinetti 1997; Lindgren 1997; Luterek 1996; Markalas 1997; Niemeyer et al. 1996; Peltonen, Heliövaara, & Väisänen 1997; Sadof, Waltz, & Kellam 1995; Starzyk 1996:30; Ye Hui & Lieutier 1997. **(cn)** Anonymous 1994e, 1995a, 1996a, 1996b; Appleby 1999; Bois, Lieutier, & Yart 1996; Bois et al. 1997; Bogdanova 1998; Bridges 1995; Cech & Krehan 1997; Czokajlo et al. 1997; Diminic, Glavas, & Hrašovec 1995; Dajoz 1998; Ehnström, Långström, & Hellqvist 1995; Grodzki, Kolk, & Stocki 1997; Haack 1997, 1998a; Haack & Lawrence 1997b; Haack et al. 1997, 1999; Humphreys & Allen 1999a; Jaaskela et al. 1997; Kauffman, Waltz, & Cummings 1998; Kenis 1998; Knížek 1998a; Knížek & Zahradník 1999; Kolk & Sierpiński 1999; Koltay 1998; Långström, Hellqvist, & Ehnström 1999; Leontovyč, Turčani, & Zúbrik 1999; Lindgren 1997; Luterek 1996; McCullough 1996; McCullough & Sadof 1996, 1998; McCullough & Smitley 1995; McCullough, Haack, & McLane 1998; Mihalache, Mihalciuc, & Ciornei 1997; Moraal 1996a, 1996b; Pan Yongzhi & Cao Kuiguang 1996; Peltonen 1999; Perny 1997; Poland & Haack 1999; Simionescu 1995; Šrůtka, Liška, & Kapitola 1998; Starzyk 1996; Tomiczek & Krehan 1999; Tsankov, Mirchev, & Tomovsky 1999; Turčani 1998; USDA 1992, 1995a, 1995b, 1996; Ye Hui 1996, 1999; Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník & Šrůtka 1999; Zahradník et al. 1995:6; Zolubas 1999. **(ds)** Anonymous 1992a:632, 1994e:33, 1995a:34, 1996a:30; Bakke 1996; Gutowski & Kubisz 1995; Haack 1996; Haack & Cavey 1997:5; Haack & Lawrence 1994; Haack et al. 1997; Hansen, M. 1996:211; Hellqvist 1999; Humphreys & Allen 1999a; Kido & Azuma 1995; Krivolutskaya 1996a:337; Kulinich & Orlinskii 1998; LaGasa, Furniss, & Kamping 1997; Lakatos 1999c; Långström et al. 1999; Lombardero 1995:359,360; Markalas 1997:59; Mattson et al. 1994:12; Öymen 1992; Peltonen et al. 1998; Podlussány 1998:303; Riba 1996; Roper 1996; Sippola, Siitonen, & Kamping 1997; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:23, 2000:45; Whitehouse 1997a; Yanovskii 1999:333. **(ec)** Amezaga 1996, 1997; Amezaga & Rodriguez 1998; Arefjew 1999; Bogdanova 1998; Bois & Lieutier 1997; Bois, Lieutier, & Yart 1999; Braasch, Metge, & Burgermeister 1999; Chen et al. 1999; Croise, Lieutier, & Dreyer 1998; Dajoz 1998:441; Ehnström, Långström, & Hellqvist 1995; Haack & Lawrence 1995b; Hedqvist 1998:76; Herard & Mercadier 1996; Kenis 1998; Knížek 1998a; Kolomiets & Bogdanova 1998; Lieutier et al. 1995; Martikainen et al. 1999; Mokrzycki 1995a; Õunap 1999; Peltonen, Heliövaara, & Väisänen 1997; Peltonen et al. 1998; Poland & Haack 1999; Ryall & Smith 1997; Sadof, Waltz, & Kellam 1995; Schroeder 1996, 1997a, 1997b, 1999b; Simionescu 1995; Skarmoutsos, Braasch, & Michalopoulou 1998; Xudong, Hui, & Lieutier 1999; Ye Hui 1997, 1999; Ye Hui & Zhimo 1995; Zhou Xudong, Ye Hui, & Ding Huasun 1999. **(hb)** Amezaga 1996; Amezaga & Rodriguez 1998; Chen et al. 1999; Dajoz 1998:441; Gutowski & Kubisz 1995; Haack & Lawrence 1995a, 1995b, 1997a; Humphreys & Allen 1999a; Kauffman, Waltz, & Cummings 1998; Knížek 1998a; Lieutier et al. 1995; Poland & Haack 1999; Ryall & Smith 1997; Schroeder 1999; Tsankov, Mirchev, & Tomovsky 1999; Ye Hui 1996, 1997, 1999; Ye Hui & Lonshu 1995; Ye Hui & Xue-Song 1999; Ye Hui & Zhimo 1995. **(ms)** Anonymous 1992b.

(tx) Carter et al. 1996; Galián & Gallego 2000; Knížek 1998a; Krivolutskaya 1996a:337; Anonymous 1992a:632; Voolma, Õunap, & Süda 1997b:23; Yanovskii 1999:333.

Page 136 ***puellus*** (Reitter). Add:

REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:337; Kulinich & Orlinskii 1998; Yanovskii 1999:333. **(tx)** Krivolutskaya 1996a:337; Yanovskii 1999:333.

Page 136 *puellus orientalis* Krivolutskaya (synonym of ***puellus*** (Reitter)). Add:

REFERENCES: **(ds)** Krivolutskaya 1996a:337. **(tx)** Krivolutskaya 1996a:337.

Genus **Dendroctonus** Erichson

Page 136 **Dendroctonus** Erichson. Add:

KEYS: Cibrián et al. 1995:270 (to Mexican species); Rykken & Hanson 1999:16 (to species in northeastern United States).

REFERENCES: **(an)** Kelley & Farrell 1999; Zúñiga, Cisneros, & Macías-Sámano 1999. **(cn)** Dajoz 1998:449; Fredericksen, Hedden, & Williams 1995; Oliver 1995. **(ds)** Zúñiga et al. 1999; Zúñiga, Cisneros, & Macías-Sámano 1999. **(ec)** Dajoz 1998:449; Six & Paine 1999a; Zúñiga et al. 1999. **(hb)** Dajoz 1998:449. **(tx)** Cibrián et al. 1995; Kelley & Farrell 1998, 1999; Krivolutskaya 1996a:336; Voolma, Õunap, & Süda 1997b:24.

Page 137 ***adjunctus*** Blandford. Add:

FIGURES: Cibrián et al. 1995:283 (adult, damage, gallery pattern).

DISTRIBUTION: NORTH AMERICA: Mexico (Chiapas, Coahuila, Durango, Guerrero, Jalisco, Mexico D. F., Michoacán, Oaxaca, Querétaro, Sonora, Tlaxcala, Veracruz).

HOSTS: *Pinus arizonica, P. chihuahuana, P. durangensis, P. flexilis, P. herrerai, P. lawsoni, P. maximinoi, P. michoacana, P. patula, P. pinceana.*

REFERENCES: **(an)** Zúñiga, Cisneros, & Salinas 1998. **(bv)** Borden 1997. **(cn)** Borden 1997; Cibrián et al. 1995:282; EPPO/CABI 1992:275, 1997:196; Skillen et al. 1997:13. **(ds)** Cibrián et al. 1995:282; EPPO/CABI 1992:275, 1997:196. **(ec)** EPPO/CABI 1992:275; Six & Paine 1996b, 1999. **(hb)** Cibrián et al. 1995:282; EPPO/CABI 1992:275, 1997:196. **(tx)** EPPO/CABI 1997:196; Zúñiga, Cisneros, & Salinas 1998.

Page 137 *convexifrons* Hopkins (synonym of ***adjunctus*** Blandford). Add:

REFERENCES: **(cn)** Negron 1997.

Page 138 ***approximatus*** Dietz. Add:

FIGURES: Cibrián et al. 1995:291 (adult, damage, gallery pattern).

DISTRIBUTION: NORTH AMERICA: Mexico (Coahuila, Jalisco, Nuevo León, Querétaro, Sonora, Tamaulipas, Zacatecas).

HOSTS: *Pinus durangensis, P. michoacana, P. oocarpa, P. patula, P. pseudostrobus.*

REFERENCES: **(an)** Zúñiga, Cisneros, & Salinas 1998. **(cn)** Cibrián et al. 1995:288. **(ds)** Cibrián et al. 1995:288. **(hb)** Cibrián et al. 1995:288. **(tx)** Zúñiga, Cisneros, & Salinas 1998.

Page 138 ***armandi*** Tsai & Li. Add:
DISTRIBUTION: ASIA: China (Gansu, Heilongjiang, Hunan).
REFERENCES: **(ec)** Chen et al. 1999; Tang & Chen 1999; Yang 1996. **(hb)** Chen et al. 1999.

Page 138 ***brevicomis*** LeConte. Add:
FIGURES: Cibrián et al. 1995:287 (adult, damage, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Coahuila, Durango, Nuevo León, Zacatecas).
HOSTS: *Pinus arizonica stormiae, P. durangensis, P. estevezii.*
REFERENCES: **(bv)** Borden 1995c, 1997; Poland et al. 1998; Thistle et al. 1999. **(cn)** Borden 1995c, 1997; Cibrián et al. 1995:286; EPPO/CABI 1992:275, 1997:201; Everitt et al. 1997a, 1997b; Haverty, Shea, & Wenz 1997; Haverty et al. 1998; Paine & Bertram 1995; Skillen et al. 1997:15; Steele et al. 1996. **(ds)** Cibrián et al. 1995:286; EPPO/CABI 1992:275, 1997:201. **(ec)** Dahlsten, Rowney, & Kickert 1997; EPPO/CABI 1992: 275; Hsiau & Harrington 1997. **(hb)** Cibrián et al. 1995:286; EPPO/CABI 1992:275, 1997:201; Peck, Equihua-Martinez, & Ross 1997:207. **(tx)** EPPO/CABI 1997:196; Kelley, Mitton, & Paine 1999.

Page 143 ***frontalis*** Zimmermann. Add:
FIGURES: Cibrián et al. 1995:281 (adult, damage, gallery pattern); Cibrián 1998 (adult, larva, gallery pattern); Meeker, Dixon, & Foltz 1995 (habitus, gallery pattern, damage).
DISTRIBUTION: NORTH AMERICA: Mexico (Durango, Mexico, Michoacán, Oaxaca).
HOSTS: *Pinus arizonica, P. durangensis, P. greggii, P. maximinoi, P. pringlei, P. tecumanni, P. teocote.*
REFERENCES: **(an)** Cane, Cox, & Moar 1995; Hayes 1999; Miller, Kinn, & Parresol 1995; Zhong et al. 1995a, 1995b; Zúñiga, Cisneros, & Salinas 1998. **(bv)** Borden 1997; Conner et al. 1998; Flechtmann, Dalusky, & Berisford 1999; Grosman et al. 1997; Skillen et al. 1997:19; Strom et al. 1999; Thistle et al. 1998; Turchin & Odendaal 1996. **(cn)** Billings et al. 1995; Borden 1997; Cane, Cox, & Moar 1995; Carter, Seal, & Haley 1998; Cibrián 1998; Cibrián et al. 1995:278; Clarke 1995; Clarke et al. 1997, 1999; Coulson et al. 1999; Edwards, Harrington, & Mingguang 1998; EPPO/CABI 1992:275, 1997:206; Haack & Paiz-Schwartz 1997; Lipscomb & Edwards 1995; Lorio 1996; Lorio, Stephen, & Paine 1995; McNulty et al. 1998; Meadows & Hodges 1996; Meeker, Dixon, & Foltz 1995; Miller, Kinn, & Parresol 1995; Reeve 1997; Ruel, Ayres, & Lorio 1998; Salom et al. 1995, 1997, 1998; Stephen 1995; Strom, Goyer, & Hayes 1995; Turchin & Odendaal 1996; Turchin, Davidson, & Hayes 1999; Warren, Allen, & Booker 1999; Wilkens et al. 1998; Zhang & Zeide 1999. **(ds)** Cibrián 1998; Cibrián et al. 1995:278; EPPO/CABI 1992:275, 1997:206; Meeker, Dixon, & Foltz 1995; Peck &

Thomas 1998:157; Ungerer, Ayres, & Lombardero 1999. **(ec)** Cibrián 1998; Conner & Rudolph 1995; Conner et al. 1997, 1998; Coulson et al. 1999; Drumtra & Stephen 1999; EPPO/CABI 1992:275; Klepzig 1998; Klepzig & Wilkens 1997; Mathews & Stephen 1997, 1999; Moser et al. 1995; Nevill et al. 1995; Otrosina et al. 1997; Reeve, Rhodes, & Turchin 1998; Reeve, Simpson, & Fryar 1996; Stephen 1995; Stephen, Lih, & Browne 1997; Sullivan, Berisford, & Dalusky 1997; Turchin, Taylor, & Reeve 1999; Ungerer, Ayres, & Lombardero 1999; Warren, Allen, & Booker 1999. **(hb)** Cibrián 1998; Cibrián et al. 1995:278; Cronin et al. 1999; EPPO/CABI 1992:275, 1997:206; Hayes 1999; Lih & Stephen 1996; McNulty et al. 1998; Meeker, Dixon, & Foltz 1995; Miller, Kinn, & Parresol 1995; Rhodes, Hayes, & Steiner 1998; Wilkens et al. 1998; Zuñigo, Cisneros, & Salinas 1995. **(ms)** Meadows & Hodges 1996; Rhodes, Hayes, & Steiner 1998. **(tx)** EPPO/CABI 1997:196; Meeker, Dixon, & Foltz 1995; Zúñiga, Cisneros, & Salinas 1998.

Page 152 ***jeffreyi*** Hopkins. Add:

FIGURES: Cibrián et al. 1995:293 (adult, damage).

REFERENCES: **(an)** Six, Paine, & Hare 1999a, 1999b. **(bv)** Paine et al. 1999; Skillen et al. 1997:24. **(cn)** Cibrián et al. 1995:292. **(ds)** Cibrián et al. 1995:292. **(ec)** Six & Paine 1997, 1998, 1999a, 1999b. **(hb)** Cibrián et al. 1995:292.

Page 153 ***mexicanus*** Hopkins. Add:

FIGURES: Cibrián et al. 1995:273,277 (damage, gallery pattern, life stages).

DISTRIBUTION: NORTH AMERICA: Mexico (Aquascalientes, Colima, Guerrero, Jalisco, Nuevo León, Querétaro, San Luis Potosí, Sinola, Sonora, Tamulipas, Veracruz).

HOSTS: *Pinus arizonica, P. cembroides, P. chihuahuana, P. cooperi, P. douglasiana, P. durangensis, P. engelmanni, P. greggii, P. hartwegii, P. herrerai, P. maximinoi, P. michoacana, P. patula, P. pinceana.*

REFERENCES: **(an)** Zúñiga, Cisneros, & Salinas 1998. **(cn)** Cibrián et al. 1995:272; Tkacz et al. 1998:18,33; Villa C. & Villa C. 1996. **(ds)** Cibrián et al. 1995:272; Tkacz et al. 1998:18,33. **(ec)** Villa C. & Villa C. 1996. **(hb)** Cibrián et al. 1995:272; Tkacz et al. 1998:18,33; Zúñiga, Cisneros, & Salinas 1995. **(tx)** Zúñiga, Cisneros, & Salinas 1998.

Page 154 ***micans*** (Kugelann). Add:

FIGURES: Dajoz 1998:447 (gallery pattern); Smith & Roy 1996:27 (adult); Krivolutskaya 1996a:336 (outline).

DISTRIBUTION: EUROPE: Estonia, Latvia.

REFERENCES: **(an)** Kegley, Furniss, & Grégoire 1997. **(bv)** Dajoz 1998:448; Freer-Smith 1996; Kolomiets & Bogdanova 1998; Lunev 1998; Storer, Wainhouse, & Speight 1997; Vasiliauskas, Stenlid, & Johansson 1996; Wainhouse et al. 1998. **(cn)** Cech & Krehan 1997; Dahlsten & Mills 1999:781; Dajoz 1998:448; EPPO/CABI 1992:126, 1997:212; Evans & Fielding 1996; Fielding & Evans 1997; Krehan 1996; Legrand 1995; Lunev 1998; Mihalciuc 1997; Moraal 1996; O'Neill & Evans 1999; Smith & Roy 1996:27; Voolma 1994; Voolma & Luik 1999;

Wermlinger et al. 1999. **(ds)** EPPO/CABI 1992:126, 1997:212; Hansen, M. 1996:211; Holzschuh & Perny 1996:5; Kido & Azuma 1995; Konca 1995; Krivolutskaya 1996a:336; Kulinich & Orlinskii 1998; Legrand 1995; Öymen 1992; Telnov et al. 1997:134; Voisin 1999; Voolma & Luik 1999; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:24, 2000:45; Yanovskii 1999:334. **(ec)** Bakke 1996; Dajoz 1998:448; EPPO/CABI 1992:126; Hedqvist 1998:76; Jakuš 1995a; Kolomiets & Bogdanova 1998; Martikainen et al. 1999; Storer & Speight 1996; Wermlinger et al. 1999. **(hb)** Dajoz 1998:448; EPPO/CABI 1992:126, 1997:212; Klimetzek & Schlenstedt 1991; Storer & Speight 1996; Storer, Wainhouse, & Speight 1997; Voolma 1994. **(tx)** EPPO/CABI 1997:196; Furniss 1996; Kegley, Furniss, & Grégoire 1997; Krivolutskaya 1996a:336; Voolma, Õunap, & Süda 1997b:24; Yanovskii 1999:334.

Page 158 ***parallelocollis*** Chapuis. Add:

FIGURES: Cibrián et al. 1995:291 (adult, damage, gallery pattern).

HOSTS: *Pinus hartweggii, P. pringlei.*

REFERENCES: **(an)** Diaz et al. 1998; Zúñiga, Cisneros, & Salinas 1998. **(cn)** Cibrián et al. 1995:290; Haack & Paiz-Schwartz 1997:72. **(ds)** Cibrián et al. 1995:290. **(hb)** Cibrián et al. 1995:290; Haack & Paiz-Schwartz 1997:72. **(tx)** Zúñiga, Cisneros, & Salinas 1998.

Page 159 ***ponderosae*** Hopkins. Add:

FIGURES: Cibrián et al. 1995:295 (adult, damage); Hiratsuka, Langor, & Crane 1995:56 (habitus, gallery pattern, larva, injury); Safranyik 1995 (gallery pattern, injury, life stages); Smith & Roy 1996:28 (larvae).

REFERENCES: **(an)** Amman & Stock 1995; Logan et al. 1998a. **(bv)** Barclay, Safranyik, & Linton 1998; Bentz 1999; Bentz, Logan, & Powell 1997; Bentz, Powell, & Logan 1996; Bentz et al. 1996; Borden 1995c, 1997; Borden et al. 1998; Cerezke 1995; Cochran & Barrett 1998; Cochran & Dahms 1998; Huber et al. 1999; Miller, Borden, & Lindgren 1995; Powell 1996; Skillen et al. 1997:25; Wilson et al. 1996. **(cn)** Amman & Lindgren 1995; Amman & Logan 1998; Anhold, Jenkins, & Long 1996; Barclay, Safranyik, & Linton 1998; Bentz, Logan, & Powell 1997; Borden 1995c, 1997; Brandt 1995; Carlson et al. 1995; Cibrían et al. 1995:294; Duthie-Holt & Borden 1999; EPPO/CABI 1992:275, 1997:217; Haverty et al. 1998; Hiratsuka, Langor, & Crane 1995:57; Koch 1996; Mitchell & Preisler 1998; Naumann & Rankin 1999; Nebeker et al. 1995; Obedzinski et al. 1999; Pasek & Juntti 1997; Perkins & Swetnam 1996; Powell & Rose 1997; Powell, Logan, & Bentz 1996; Régnière & Logan 1996; Safranyik 1995; Shinneman & Baker 1997; Simpson & Coy 1999; Smith & Roy 1996:28; Steele et al. 1996; Taylor, Wilson, & White 1997; Wilson, Issac, & Gara 1998. **(ds)** Cibrián et al. 1995:294; EPPO/CABI 1992:275, 1997:217; Hiratsuka, Langor, & Crane 1995:57; Safranyik 1995. **(ec)** Amman & Logan 1998; Bartos & Schmitz 1998; Bentz 1995; Bentz & Mullins 1999; Bolstad, Bentz, & Logan 1997; EPPO/CABI 1992:275; Logan & Bentz 1999; Logan et al. 1998a, 1998b; Nevill & Safranyik 1996a, 1996b; Olsen, Schmid, & Mata 1996; Price & Jakubauskas 1998; Safranyik & Linton 1998; Safranyik et al. 1999;

Schmid & Mata 1996:2; Schmid, Mata, & Olsen 1995; Simpson & Coy 1999; Six & Paine 1998; Solheim & Krokene 1998a; Stone & Wolfe 1996; White & Powell 1998; Wilson, Issac, & Gara 1998. (**hb**) Amman & Stock 1995; Bartos & Schmitz 1998; Bentz 1999; Cerezke 1995; Cibrián et al. 1995:294; EPPO/CABI 1992:275, 1997:217; Hiratsuka, Langor, & Crane 1995:57; Logan et al. 1998b; Peck, Equihua-Martinez, & Ross 1997:207; Powell, Logan, & Bentz 1996; Régnière & Logan 1996; Safranyik 1995; Safranyik, Shore, & Linton 1998; Safranyik et al. 1999. (**ms**) Furniss 1997a; Takikawa, Shimbo, & Mori 1997; Yokoyama & Mori 1997. (**tx**) Bentz, Vandygriff, & Johnson 1996; EPPO/CABI 1997:196.

Page 168 ***pseudotsugae*** Hopkins. Add:

FIGURES: Cibrián et al. 1995:297 (adult, gallery pattern); Hiratsuka, Langor, & Crane 1995:60 (damage).

DISTRIBUTION: NORTH AMERICA: Mexico (Durango).

HOSTS: *Pseudotsuga flahaulti.*

REFERENCES: (**bv**) Borden 1995c, 1997; Huber et al. 1999; Robertson et al. 1995; Ross & Daterman 1995a, 1995b, 1997a, 1997b, 1998; Ross & Niwa 1997; Skillen et al. 1997:35. (**cn**) Borden 1995c, 1997; Brandt 1995; Cibrián et al. 1995:296; EPPO/CABI 1992:275, 1997:223; Gibson, Lieser, & Ping 1999; Hilszczanski 1998; Hiratsuka, Langor, & Crane 1995:61; Kegley et al. 1999; Negron 1998; Negron et al. 1999; Paulson 1995; Powers et al. 1999; Randall & Tensmeyer 1999; Ross & Daterman 1997a, 1997b, 1998; Ross et al. 1996; Safranyik 1995; Shore et al. 1999; Steele et al. 1996; Thier & Patterson 1997. (**ds**) Cibrián et al. 1995:296; EPPO/CABI 1992:275, 1997:223; Hiratsuka, Langor, & Crane 1995:61. (**ec**) EPPO/CABI 1992:275; Neal & Ross 1999; Powers 1995; Ross & Daterman 1997a, 1997b; Ross & Solheim 1995a, 1997; Safranyik 1995; Schmid & Mata 1996:5; Solheim & Krokene 1998b. (**hb**) Cibrián et al. 1995:296; EPPO/CABI 1992:275, 1997:223; Hiratsuka, Langor, & Crane 1995:61; Kegley et al. 1999; Peck, Equihua-Martinez, & Ross 1997:207; Powers 1995; Prenzel, Laidlaw, & Wieser 1999; Ross & Daterman 1997a, 1997b; Safranyik 1995. (**tx**) EPPO/CABI 1997:196.

Page 173 ***punctatus*** LeConte. Add:

REFERENCES: (**an**) Kegley, Furniss, & Grégoire 1997. (**bv**) Lewis & Lindgren 1998; Lindgren, Lewis, & Grégoire 1999. (**ec**) Furniss 1995; Lewis & Lindgren 1998. (**hb**) Furniss 1995. (**tx**) Furniss 1996; Kegley, Furniss, & Grégoire 1997.

Page 173 ***rhizophagus*** Thomas & Bright. Add:

FIGURES: Cibrián et al. 1995:359 (life cycle), 361 (adult, damage).

DISTRIBUTION: NORTH AMERICA: Mexico (Sinaloa, Sonora, Zacatecas).

HOSTS: *Pinus arizonica, P. ayachuite, P. chihuahuana, P. cooperi, P. herrerai, P. jeffreyi, P. leiophylla, P. lumholtzii, P. michoacana, P. ponderosae, P. sylvestris.*

NOTES: The hosts listed above require confirmation.

REFERENCES: **(an)** Diaz et al. 1998; Zúñiga, Cisneros, & Salinas 1998. **(cn)** Cibrián et al. 1995:358; Tkacz et al. 1998:18,40. **(ds)** Cibrián et al. 1995:358; Tkacz et al. 1998:18,40. **(hb)** Cibrián et al. 1995:358; Tkacz et al. 1998:18,40. **(tx)** Zúñiga, Cisneros, & Salinas 1998.

Page 173 ***rufipennis*** Kirby. Add:

FIGURES: Hiratsuka, Langor, & Crane 1995:58 (habitus, larvae, gallery pattern, damage); Safranyik 1995 (gallery pattern, injury).

REFERENCES: **(an)** Wallin & Raffa 1999a; Zhong et al. 1995a, 1995b. **(bv)** Baker 1998; Borden 1995c, 1997; Borden et al. 1996; Huber et al. 1999; Poland 1997; Poland & Borden 1998b, 1998c; Poland et al. 1998; Setter & Borden 1999; Skillen et al. 1997:40; Wallin & Raffa 1999a; Werner 1995. **(cn)** Borden 1995c, 1997; Brandt 1995; Clay & Marsh 1997; Cole, Newton, & Youngblood 1999; EPPO/CABI 1992:275, 1997:228; Garbutt 1996; Gibson, Lieser, & Ping 1999; Hiratsuka, Langor, & Crane 1995:59; Loso 1998; Lowell & Willits 1998; Reynolds & Holsten 1996, 1997; Safranyik 1995; Scott et al. 1996; Steele et al. 1996; Werner & Holsten 1995. **(ds)** Bain 1999; EPPO/CABI 1992:275, 1997:228; Hiratsuka, Langor, & Crane 1995:59; Rykken & Hanson 1999:18; Safranyik 1995. **(ec)** Baker 1998; EPPO/CABI 1992:275; Gara et al. 1995: Harrington et al. 1996; Holsten, Werner, & Develice 1995; Kirisits, Wingfield, & Führer 1998; Lindgren & Lewis 1997; Poland & Borden 1997, 1998b, 1998c; Safranyik & Linton 1999; Schmid & Mata 1996:3; Solheim & Safranyik 1997; Stewart 1995; Wallin & Raffa 1999a; Wingfield, Harrington, & Solheim 1997; Zhang, Alfaro, & Hebda 1999. **(hb)** EPPO/CABI 1992:275, 1997:228; Hiratsuka, Langor, & Crane 1995:59; Peck, Equihua-Martinez, & Ross 1997:207; Poland 1997; Rykken & Hanson 1999:18; Safranyik 1995; Safranyik et al. 1995; Werner & Holsten 1997. **(tx)** EPPO/CABI 1997:196; Rykken & Hanson 1999:18.

Page 180 ***simplex*** LeConte. Add:

FIGURES: Hiratsuka, Langor, & Crane 1995:60 (habitus, larvae, damage).

REFERENCES: **(bv)** Borden 1997; Skillen et al. 1997:43; Werner 1995. **(cn)** Borden 1997; Safranyik 1995. **(ds)** Bain 1999; Hiratsuka, Langor, & Crane 1995:61; Rykken & Hanson 1999:19; Safranyik 1995. **(hb)** Hiratsuka, Langor, & Crane 1995:61; Rykken & Hanson 1999:19; Safranyik 1995. **(tx)** Rykken & Hanson 1999:19.

Page 181 ***terebrans*** (Olivier). Add:

DISTRIBUTION: NORTH AMERICA: United States (Oklahoma).

REFERENCES: **(an)** Zúñiga, Cisneros, & Salinas 1998. **(bv)** Flechtmann, Dalusky, & Berisford 1999; Nation, Holtz, & Phillips 1996; Skillen et al. 1997:44. **(ds)** Arnold & Jiracek 1982; Peck & Thomas 1998:157. **(hb)** Dunn 1996:194. **(tx)** Dunn 1996:194; Zúñiga, Cisneros, & Salinas 1998.

Page 183 ***valens*** LeConte. Add:

FIGURES: Cibrián et al. 1995:299 (adult, damage, gallery pattern).

DISTRIBUTION: NORTH AMERICA: Mexico (Guerrero, Jalisco, Nuevo León, Oaxaca, Querétaro, Sonora, Tamaulipas, Veracruz).
HOSTS: *Pinus arizonica, P. ayacahuite, P. douglasiana, P. engelmanni, P. greggii, P. hartwegii, P. herrerai, P. jeffreyi, P. lawsoni, P. leiophylla, P. maximinoi, P. michoacana, P. montezumae, P. oocarpa, P. pseudostrobus, P. teocote.*
REFERENCES: (**an**) Diaz et al. 1998; Zúñiga, Cisneros, & Salinas 1998. (**bv**) Safranyik, Shore, & Linton 1999. (**cn**) Cibrián et al. 1995:298; Klepzig, Smalley, & Raffa 1996; Wenz 1996. (**ds**) Cibrián et al. 1995:298; Rykken & Hanson 1999:17. (**ec**) Klepzig, Smalley, & Raffa 1995, 1996. (**hb**) Cibrián et al. 1995:298; Dunn 1996:193; Peck, Equihua-Martinez, & Ross 1997:207; Rykken & Hanson 1999:17. (**tx**) Dunn 1996:193; Rykken & Hanson 1999:17; Zúñiga, Cisneros, & Salinas 1998.

Genus **Hylurdrectonus** Schedl

Page 186 ***araucariae*** Schedl. Add:
REFERENCES: (**ds**) Waterhouse 1997:43,45.

Page 186 ***piniarius*** Schedl. Add:
REFERENCES: (**ds**) Waterhouse 1997:43,48.

Genus **Hylurgonotus** Schedl

Page 187 ***antipodus*** (Eggers). Add:
REFERENCES: (**ds**) Morrone 1997:11.

Page 187 ***armaticeps*** Schedl. Add:
REFERENCES: (**ds**) Morrone 1997:11.

Page 187 ***solidus*** (Schedl). Add:
HOSTS: *Araucaria araucana.*
REFERENCES: (**ds**) Morrone 1997:11.

Page 187 ***tuberculatus*** (Eggers). Add:
REFERENCES: (**ds**) Morrone 1997:11.

TRIBE HYORRHYNCHINI

Genus **Hyorrhynchus** Blandford

Page 192 ***lewisi*** Blandford. Add:
REFERENCES: (**ds**) Yanovskii 1999:334. (**tx**) Yanovskii 1999:334.

Page 192 ***obesus*** Browne. Add:
DISTRIBUTION: ASIA: Thailand (Trang).
REFERENCES: (**ds**) Beaver 1999d:180.

Genus **Pseudohyorrhynchus** Murayama

Page 192 **Pseudohyorrhynchus** Murayama. Add:
REFERENCES: **(tx)** Krivolutskaya 1996a:330.

Page 192 ***wadai*** Murayama. Add:
new subspecies ***kurilensis*** Krivolutskaya 1996a:330. Holotype ♂; Kuril Islands, Russia; Krivolutskaya collection.
DISTRIBUTION: ASIA: Kuril Islands.
REFERENCES: **(tx)** Krivolutskaya 1996a:330.

TRIBE DIAMERINI

Genus **Acacacis** Lea

Page 193 ***abundans*** Lea. Add:
FIGURES: Calder 1989:1261 (alimentary canal), 1265 (central nervous system).
REFERENCES: **(an)** Calder 1989.

Genus **Diamerus** Erichson

Page 196 ***lignivorus*** Browne. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Genus **Sphaerotrypes** Blandford

Page 198 **Sphaerotrypes** Blandford. Add:
KEYS: Krivolutskaya 1996a:316 (to East Russian species).
REFERENCES: **(tx)** Krivolutskaya 1996a:329.

Page 199 ***coimbatorensis*** Stebbing. Add:
FIGURES: Anonymous 1992a:633 (habitus).
DISTRIBUTION: ASIA: China (Beijing, Heilongjiang, Hunan, Shaanxi).
HOSTS: *Juglans regia*.
REFERENCES: **(ds)** Anonymous 1992a:633; Krivolutskaya 1996a:329. **(ec)** Yang 1996. **(tx)** Anonymous 1992a:633; Krivolutskaya 1996a:329.

Page 199 ***inermis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:45.

Page 200 ***juglansis*** Krivolutskaya & Kupyanskaya. Add:
FIGURES: Krivolutskaya 1996a:313 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:330; Yanovskii 1999:334. **(tx)** Krivolutskaya 1996a:330; Yanovskii 1999:334.

Page 200 ***pila*** Blandford. Add:
REFERENCES: **(ds)** Yanovskii 1999:334. **(tx)** Yanovskii 1999:334.

Page 201 ***sulcatus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:45.

Genus **Strombophorus** Hagedorn

Page 203 ***ericius*** (Schaufuss). Add:
DISTRIBUTION: AFRICA: Cote d'Ivorie, Kenya (Beaver & Löyttyniemi 1989:287).

TRIBE BOTHROSTERNINI

Genus **Cnesinus** LeConte

Page 205 **Cnesinus** LeConte. Add:
REFERENCES: (**ds**) Abreu, Fonseca, & Marques 1997.

Page 205 ***ampliatus*** Schedl. Add:
HOSTS: *Pouteria salicifolia* (Viana 1964:128).

Page 207 ***dividuus*** Schedl. Add:
HOSTS: *Araucaria angustifolia, Gleditsia triacanthos, Ligustrum incidum, Robinia pseudoacacia* (Viana 1964:128).

Page 207 *dryographus* Schedl (synonym of ***dividuus*** Schedl). Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Borges 1990:203; Flechtmann & Ottati 1996.

Page 209 ***lecontei*** Blandford. Add:
HOSTS: Petiole of *Croton reflexus*.
REFERENCES: (**ds**) Jordal & Kirkendall 1998.

Page 210 ***novateutonicus*** Schedl. Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Abreu, Fonseca, & Marques 1997. (**hb**) Dall'Oglio & Filho 1997.

Page 212 ***strigicollis*** LeConte. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:158.

Genus **Pagiocerus** Eichhoff

Page 213 ***frontalis*** (Fabricius). Add:
REFERENCES: (**an**) Costilla & Coronel 1994. (**cn**) Costilla & Coronel 1994. (**ds**) Bright & Peck 1998:237,249; Costilla & Coronel 1994; Peck & Thomas 1998:158. (**ec**) Okello, Reichmuth, & Schulz 1996a, 1996b. (**hb**) Costilla & Coronel 1994; Okello, Reichmuth, & Schulz 1996a, 1996b.

Page 214 ***punctatus*** Eggers. Add:
HOSTS: *Araucaria angustifolia*.
REFERENCES: **(ds)** Borges 1990:203.

Genus **Bothrosternus** Eichhoff

Page 215 ***isolatus*** Bright.
Delete "Dominica" and "Guadeloupe" from Distribution in 1997 supplement (page 45).

Page 215 ***suturalis*** Eggers. Add:
HOSTS: *Araucaria angustifolia*.
REFERENCES: **(ds)** Borges 1990:203.

TRIBE PHLOEOTRIBINI

Genus **Phloeotribus** Latreille

Page 217 **Phloeotribus** Latreille. Add:
KEYS: Voolma, Õunap, & Süda 1997b:24 (to Estonian species).
REFERENCES: **(tx)** Krivolutskaya 1996a:337; Voolma, Õunap, & Süda 1997b:24.

Page 218 ***argentinensis*** (Schedl). Add:
HOSTS: *Araucaria angustifolia* (Viana 1964:126).

Page 219 ***brevicollis*** (Kolenati). Add:
REFERENCES: **(ds)** Öymen 1992.

Page 219 ***caucasicus*** Reitter. Add:
REFERENCES: **(ds)** Bense & Schott 1998:326; Holzschuh 1995:134.

Page 220 ***cylindricus*** Schedl. Add:
HOSTS: *Araucaria angustifolia* (Viana 1964:127).

Page 221 ***dentifrons*** (Blackman). Add:
REFERENCES: **(ds)** Katovich & Ostry 1998:102; Peck & Thomas 1998:158.
Delete "Ohio" from Distribution in 1997 supplement (page 47).

Page 221 ***frontalis*** (Olivier). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 222 ***huapiae*** (Schedl). Add:
HOSTS: *Lomatia hirsuta* (Naumann-Etienne 1978).

Page 223 ***jujuya*** Blackman. Add:
HOSTS: *Fagara coco* (Viana 1964:127).

Page 223 ***lecontei*** Schedl. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).

REFERENCES: **(ds)** Furniss & Johnson 1995:336. **(hb)** Furniss & Johnson 1995; Peck, Equihua-Martinez, & Ross 1997:207.

Page 223 ***liminaris*** (Harris). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 224 ***mayeti*** (Guillebeau). Add:
REFERENCES: **(ds)** Öymen 1992.

Page 225 ***muricatus*** (Eggers). Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: **(ds)** Öymen 1992.

Page 226 ***piceae*** Swaine. Add:
REFERENCES: **(ds)** Lavoie, Elias, & Filion 1997:398.

Page 227 ***pseudocristatus*** (Pfeffer). Add:
REFERENCES: **(ds)** Öymen 1992.

Page 227 ***pubifrons*** (Guillebeau). Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: **(ds)** Öymen 1992.

Page 228 ***rhododactylus*** (Marsham). Add:
FIGURES: Lombardero 1995:366 (gallery pattern).
DISTRIBUTION: ASIA: Turkey. EUROPE: Latvia.
HOSTS: *Ulex europaeus*.
REFERENCES: **(ds)** Alexander 1997; Hansen, M. 1996:211; Hansen, M. et al. 1996:270; Lombardero 1995:364,366,367; Markovic & Stojanovic 1997; Miller, R.F. 1997; Moffett & Smith 1997:167; Osborne 1996:187; Öymen 1992; Riba 1996; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1997b:24; Whitehead 1997. **(tx)** Voolma, Õunap, & Süda 1997b:24.

Page 230 ***scabricollis*** (Hopkins). Add:
FIGURES: Lombardero 1995:367 (gallery pattern).
REFERENCES: **(ds)** Lombardero 1995:367; Peck & Thomas 1998:158.

Page 230 ***scarabaeoides*** (Bernard). Add:
REFERENCES: **(an)** Sobreiro 1993. **(bv)** Campos & Peña 1995; González & Campos 1995, 1996; Lozano et al. 1998; Mustafa & El-Mazraawi 1996; Peña et al. 1998; Szauman-Szumski et al. 1998. **(cn)** Abdel Rahman 1995; Campos & Peña 1997; González & Campos 1995; Lozano, Peña, & Campos 1999; Peña et al. 1998; Sobreiro 1993. **(ds)** Öymen 1992; Riba 1996; Sobreiro 1993. **(ec)** Lozano et al. 1996, 1997, 1999; Sobreiro 1993. **(hb)** Abdel Rahman 1995; Benazoun & Oubrou 1995; Lozano, Kidd, & Campos 1996; Lozano et al. 1998, 1999; Szauman-Szumski et al. 1998.

Page 232 *rudis* Eichhoff (synonym of ***setulosus*** Eichhoff). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

Page 233 ***spinulosus*** (Rey). Add:
FIGURES: Krivolutskaya 1996a:330 (apex of elytra); Voolma, Õunap, & Süda 1997b:24 (declivity).

DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: **(en)** Mihalciuc 1997; Wermlinger et al. 1999. **(ds)** Hansen, M. 1996:211; Holzschuh & Perny 1996:5; Krivolutskaya 1996a:337; Kulinich & Orlinskii 1998; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:24, 2000:46; Yanovskii 1999:334. **(ec)** Bakke 1996; Hedqvist 1998:77; Kula & Ząbecki 1998, 1999a, 1999b; Martikainen et al. 1999; Wermlinger et al. 1999. **(hb)** Kula & Ząbecki 1999a. **(tx)** Krivolutskaya 1996a:337; Voolma, Õunap, & Süda 1997b:24; Yanovskii 1999a:334.

Page 235 ***texanus*** Schaeffer. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 235 ***uniseriatus*** Eggers. Add:
DISTRIBUTION: SOUTH AMERICA: **Brazil**, **Ecuador**, **Peru** (see Appendix).

TRIBE PHLOEOSININI

Genus **Dendrosinus** Chapuis

Page 236 ***bourreriae*** Schwarz. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Genus **Catenophorus** Nunberg

Page 237 ***congonus*** Nunberg. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Genus **Cladoctonus** Strohmeyer

Page 239 ***interruptus*** (Eggers).
Delete "Grand Cayman Island" from Distribution in 1997 supplement (page 53).

Page 239 ***similis*** Nunberg. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Genus **Phloeosinus** Schedl

Page 240 ***acatayi*** Schedl. Add:
REFERENCES: **(ds)** Öymen 1992.

Page 240 ***armatus*** Reitter. Add:
REFERENCES: **(ds)** Öymen 1992.

Page 241 ***baumanni*** Hopkins. Add:
FIGURES: Cibrián et al. 1995:323 (adult, damage, gallery pattern).

DISTRIBUTION: NORTH AMERICA: Mexico (Aguascalientes, Mexico, Tlaxcala).

REFERENCES: **(cn)** Cibrián et al. 1995:322. **(ds)** Cibrián et al. 1995:322. **(hb)** Cibrián et al. 1995:322.

Page 241 ***bicolor*** (Brulle). Add:

FIGURES: Anonymous 1992a:632 (declivity).

DISTRIBUTION: ASIA: China (Guizhou, Hunan, Shaanxi, Yunnan).

HOSTS: *Cupressus funebris, C. lusitanica, C. torulosa, Platycladus orientalis, Sabina chinensis.*

REFERENCES: **(ds)** Anonymous 1992a:632; Hastings 1998; Riba 1996. **(ec)** Khaustov 1998a:1141. **(tx)** Anonymous 1992a:632.

Page 242 *aubei* Perris (synonym of ***bicolor*** (Brulle)). Add:

REFERENCES: **(bv)** Dong 1997. **(cn)** Dong 1997. **(ds)** Lombardero 1995:361; Öymen 1992. **(ec)** Dong 1997; Yang 1996. **(hb)** Dong 1997.

Page 244 ***cedri*** Brisout. Add:

DISTRIBUTION: ASIA: Turkey.

REFERENCES: **(ds)** Öymen 1992. **(hb)** Benhalima et al. 1999.

Page 245 ***cupressi*** Hopkins. Add:

FIGURES: Calder 1989:1261 (alimentary canal), 1265 (central nervous system), 1990:504 (reproductive system).

REFERENCES: **(an)** Calder 1989, 1990.

Page 246 ***dentatus*** (Say). Add:

REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 250 ***perlatus*** Chapuis. Add:

FIGURES: Anonymous 1992a:633 (declivity).

DISTRIBUTION: ASIA: China (Hunan).

REFERENCES: **(cn)** Oogita et al. 1997; Soma et al. 1997, 1998. **(ds)** Anonymous 1992a:633; Yanovskii 1999:335. **(ec)** Matsuda, Nakamura, & Itao 1997. **(ms)** Soma et al. 1996. **(tx)** Anonymous 1992a:633; Yanovskii 1999:335.

Page 251 ***podocarpi*** Browne. Add:

REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:42.

Page 252 ***rudis*** Blandford. Add:

REFERENCES: **(ds)** Haack & Cavey 1997:5.

Page 253 ***sequoiae*** Hopkins. Add:

FIGURES: Duncan 1996:5 (gallery pattern, damage).

REFERENCES: **(cn)** Duncan 1996:5. **(ds)** Duncan 1996:5. **(hb)** Duncan 1996:5.

Page 254 ***serratus*** (LeConte). Add:

DISTRIBUTION: NORTH AMERICA: Mexico (San Luis Potosí).

REFERENCES: **(cn)** Cibrían et al. 1995:324. **(ds)** Cibrían et al. 1995:324. **(hb)** Cibrían et al. 1995:324.

Page 255 ***sinensis*** Schedl. Add:
FIGURES: Anonymous 1992a:633 (declivity).
DISTRIBUTION: ASIA: China (Fujian, Hunan).
HOSTS: *Cunninghamia lanceolata*.
REFERENCES: **(ds)** Anonymous 1992a:633. **(ec)** Yang 1996:303. **(tx)** Anonymous 1992a:633.

Page 256 ***tacubayae*** Hopkins. Add:
FIGURES: Cibrían et al. 1995:325 (adult, larva, gallery pattern, pupa).
HOSTS: *Juniperus* sp.
REFERENCES: **(cn)** Cibrían et al. 1995:324. **(ds)** Cibrían et al. 1995: 324. **(hb)** Cibrían et al. 1995:324.

Page 256 ***taxodii taxodii*** Blackman. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 256 ***thujae*** (Perris). Add:
REFERENCES: **(ds)** Hastings 1998; Lombardero 1995:361; Öymen 1992; Riba 1996.

Page 258 ***turkestanicus*** Semenov. Add:
FIGURES: Aksent'yev 1994(1995:4) (larval features).
HOSTS: *Juniperus sabina.*
REFERENCES: **(tx)** Aksent'yev 1994(1995:4).

Genus **Hyledius** Sampson

Page 259 ***brunneus*** (Browne). Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:42.

Page 260 *latus* Eggers (synonym of ***nitidicollis*** (Motschulsky)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

Page 261 ***solomonicus*** (Browne). Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:43.

Page 261 *spinifer* (Browne). Add:
NOTES: The correct name for this taxon is ***H. armatus*** (Schedl), with *H. spinifer* as an unnecessary replacement name and a synonym.
REFERENCES: **(tx)** Beaver 1998c:185.

Page 261 ***takahashii*** (Browne). Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:43.

Genus **Pseudochramesus** Blackman

Page 262 ***brasiliensis*** Schedl. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Page 262 ***vianai*** Schedl. Add:
HOSTS: *Acacia cavenia* (Viana 1964:128).

Genus **Chramesus** LeConte

Page 263 ***argentinensis*** Schedl. Add:
HOSTS: *Celtis spinosa* (Viana 1964:127).

Page 263 ***aspericollis*** Schedl. Add:
HOSTS: *Celtis spinosa, Nectrandra* sp. (Viana 1964:127).

Page 264 ***cecropiae*** Wood. Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Page 264 ***chapuisi*** LeConte. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 265 ***globosus*** Hagedorn. Add:
HOSTS: *Celtis spinosa*, *Celtis* sp. (Viana 1964:127).

Page 266 ***hicoriae*** LeConte. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 267 ***opacicollis*** Eggers.
Delete "Cuba, Grenada, Jamaica, Martinique" in Distribution in 1997 supplement (page 60).

Page 269 ***spinosus*** Brethes. Add:
HOSTS: *Acacia bonariensis*, *Cupressus macrocarpa* (Viana 1964:127).

Page 269 ***subopacus*** Schaeffer. Add:
REFERENCES: **(bv)** Jakuš 1998a, 1998b, 1998c. **(ds)** Peck & Thomas 1998:158. **(ec)** Jakuš 1998a, 1998b, 1998c.

Page 269 ***tibialis*** Wood.
Delete "Honduras" from Distribution in 1997 supplement (page 60).

TRIBE HYPOBORINI

Genus **Chaetophloeus** LeConte

Page 273 ***insularis*** (Blackman). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Genus **Liparthrum** Wollaston

Page 275 ***arnoldi*** Semenov. Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: **(ds)** Öymen 1992.

Page 275 ***bartschti*** Muhl. Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: **(ds)** Öymen 1992.

Page 276 ***colchicum*** Semenov. Add:
HOSTS: *Laurus nobilis*.
REFERENCES: (**ds**) Lombardero 1995:365.

Page 277 ***genistae*** (Aube). Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: (**ds**) Öymen 1992; Whitehead 1997.

Page 277 *peyrimhoffi* Pfeffer (synonym of ***genistae*** (Aube)). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:56.

Page 277 ***laurivorus*** Schedl. Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: (**ds**) Öymen 1992.

Page 278 ***mandibulare*** Wollaston. Add:
REFERENCES: (**ds**) Lombardero 1995:362,363,365; Winter 1992a.

Page 278 ***mori*** (Aubé). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:56.

Page 279 ***nigrescens*** Wollaston. Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: (**ds**) Öymen 1992.

Page 279 *degener* Lindberg (synonym of ***nigrescens*** Wollaston). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:56.

Page 64S ***canum*** Israelson. Add:
REFERENCES: (**ds**) Leiler 1998.

Genus **Hypoborus** Erichson

Page 280 ***ficus*** Erichson. Add:
REFERENCES: (**ds**) Lombardero 1995:364; Öymen 1992; Riba 1996. (**ec**) Khaustov 1997, 1998a:1138; Magowski & Khaustov 1999.

TRIBE POLYGRAPHINI

Genus **Serrastus** Nunberg

Page 283 *ivoriensis* Nunberg (synonym of ***similis*** (Eggers)). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:58.

Genus **Polygraphus** Erichson

Page 283 **Polygraphus** Erichson. Add:
KEYS: Krivolutskaya 1996a:338 (to East Russian species); Voolma, Õunap, & Süda 1997b:24 (to Estonian species); Yin & Huang 1996:350 (to Chinese species (in Chinese)).

REFERENCES: **(ds)** Yin & Huang 1996. **(ec)** Õunap 1999. **(tx)** Krivolutskaya 1996a:338; Voolma, Õunap, & Süda 1997b:24; Yin & Huang 1996.

Page 284 ***abietis*** Kurenzov. Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998; Yanovskii 1999:335. **(tx)** Yanovskii 1999:335.

Page 286 ***coronatus*** Eggers. Add *granulifer* Eggers as a synonym. Add:
SYNONYMY: Schedl 1972:279.
NOTES: Synonymy omitted in 1992 catalog and 1997 supplement.
REFERENCES: **(tx)** Schedl 1972:279; Beaver 1998c:185.

Page 286 ***gracilis*** Niisima. Add:
FIGURES: Krivolutskaya 1996a:340 (antenna).
REFERENCES: **(ds)** Krivolutskaya 1996a:340; Kulinich & Orlinskii 1998; Yanovskii 1999:335. **(tx)** Krivolutskaya 1996a:340; Yanovskii 1999:335.

Page 286 ***grandiclava*** Thomson. Add:
REFERENCES: (ec) Jakuš 1995a.

Page 288 *granulifer* Eggers. Move to ***coronatus*** Eggers as a synonym. Add:
SYNONYMY: Schedl 1972e:279.
NOTES: Synonymy omitted in 1992 catalog and 1997 supplement.

Page 288 ***horyurensis*** Murayama. Add:
FIGURES: Krivolutskaya 1996a:340 (antenna).
REFERENCES: **(ds)** Krivolutskaya 1996a:340; Yanovskii 1999:335. **(tx)** Krivolutskaya 1996a:340; Yanovskii 1999:335.

Page 288 ***jezoensis*** Niisima. Add:
FIGURES: Krivolutskaya 1996a:340 (antenna).
REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:340; Kulinich & Orlinskii 1998; Yanovskii 1999:335. **(tx)** Krivolutskaya 1996a:340; Yanovskii 1999:335.

Page 289 ***major*** Stebbing. Add:
REFERENCES: **(an)** Lyal & King 1996. **(bv)** Lyal & King 1996.

Page 290 ***militaris*** (Eggers). Add:
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(hb)** Madoffe & Bakke 1995.

Page 290 ***nigrielytris*** Niisima. Add:
FIGURES: Krivolutskaya 1996a:339 (antenna).
REFERENCES: **(ds)** Krivolutskaya 1996a:339; Yanovskii 1999:335. **(tx)** Krivolutskaya 1996a:339; Yanovskii 1999:335.

Page 291 ***poligraphus*** (Linnaeus). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:24 (antenna).
DISTRIBUTION: ASIA: China (Gansu, Shaanxi, Sichuan), Turkey. EUROPE: Estonia, Latvia.
HOSTS: *Picea crassifolia, Pinus armandi.*

REFERENCES: (**bv**) Baier, Bader, & Rosner 1999; Borden 1997; Jakuš 1998a, 1998b, 1998c, 1998d; Jakuš & Dudova 1999; Mihalciuc, Mircioiu, & Bujila 1998; Peltonen, Heliövaara, & Väisänen 1997. (**cn**) Borden 1997; Ehnström, Långström, & Hellqvist 1995; Grodzki 1998a; Grodzki, Kolk, & Stocki 1997; Jakuš & Dudova 1999; Kolk & Sierpiński 1999; Mihalciuc 1997; Mihalciuc, Mircioiu, & Bujila 1998; Turĉani 1998; Turĉani & Novatný 1998; Wermlinger et al. 1999; Zahradník 1997, 1998a; Zahradník & Šrůtka 1997. (**ds**) Gutowski & Kubisz 1995; Haack & Cavey 1997:5; Haack et al. 1997; Hansen, M. 1996:211; Hastings 1998; Holzschuh & Perny 1996:5; Kido & Azuma 1995; Krivolutskaya 1996a:339; Kulinich & Orlinskii 1998; Öymen 1992; Peltonen et al. 1998; Ponel 1995; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:24,25, 2000:47; Yanovskii 1999:335. (**ec**) Bakke 1996; Braach, Metge, & Burgermeister 1999; Ehnström, Långström, & Hellqvist 1995; Händel et al. 1998; Hedqvist 1998:77; Jakuš 1995a, 1998a, 1998b, 1998c, 1998d; Krokene & Solheim 1996; Kula & Ząbecki 1997b, 1998, 1999a, 1999b; Martikainen et al. 1999; Õunap 1999; Peltonen, Heliövaara, & Väisänen 1997; Peltonen et al. 1998; Wermlinger & v. Hirschheydt 1996; Wermelinger, Fecker, & Schneider-Mathis 1998; Wermlinger et al. 1999; Yang 1996:300. (**hb**) Gutowski & Kubisz 1995; Klimetzek & Schlenstedt 1991; Peltonen, Heliövaara, & Väisänen 1997; Schroeder et al. 1999; Wermlinger & v. Hirschheydt 1996. (**tx**) Krivolutskaya 1996a:339; Voolma, Õunap, & Süda 1997b: 24,25; Yanovskii 1999:335.

Page 295 *griseus* Eggers (synonym of ***poligraphus*** (Linnaeus)). Add:
REFERENCES: (**ds**) Kulinich & Orlinskii 1998.

Page 295 *punctifrons* Thomson (synonym of ***poligraphus*** (Linnaeus)). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:24 (antenna).
REFERENCES: (**ds**) Gutowski & Kubisz 1995; Kido & Azuma 1995; Kulinich & Orlinskii 1998; Sippola, Siitonen, & Kallio 1995; Õunap, & Süda 1997a:21, 1997b:25, 2000:47; Yanovskii 1999:335. (**ec**) Hedqvist 1998:77; Kula & Ząbecki 1999a, 1999b; Martikainen et al. 1999. (**hb**) Gutowski & Kubisz 1995; Martikinen et al. 1996. (**tx**) Voolma, Õunap, & Süda 1997b:25; Yanovskii 1999:335.

Page 296 ***proximus*** Blandford. Add:
FIGURES: Krivolutskaya 1996a:339 (antenna).
DISTRIBUTION: ASIA: China (Heilongjiang).
HOSTS: *Abies nephrolepsis*.
REFERENCES: (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a:339; Yanovskii 1999:335. (**ec**) Yang 1996:313. (**tx**) Krivolutskaya 1996a:339; Yanovskii 1999:335.

Page 296 *laticollis* Eggers. (synonym of ***proximus*** Blandford). Add:
REFERENCES: (**ds**) Yanovskii 1999:335. (**tx**) Yanovskii 1999:335.

Page 297 ***rudis*** Eggers. Add *rudis likiangensis* Tsai & Yin, *rudis retiventriculus* Tsai & Yin, *zhungdianensis* Tsai & Yin, and *squameus* Yin & Huang as synonyms.
Add:
HOSTS: *Picea* sp.

REFERENCES: (**ec**) Chen et al. 1999. (**hb**) Chen et al. 1999. (**tx**) Yin & Huang 1996:347.

Page 297 *rudis likiangensis* Tsai & Yin. Move to ***rudis*** Eggers as a synonym. Add:
SYNONYMY: Yin & Huang 1996:347.

Page 297 *rudis retiventriculus* Tsai & Yin. Move to ***rudis*** Eggers as a synonym. Add:
SYNONYMY: Yin & Huang 1996:348.

Page 297 ***rufipennis*** (Kirby). Add:
REFERENCES: (**bv**) Borden 1995c. (**cn**) Borden 1995c; Bowers, Borden, & Raske 1996c; Kolk & Sierpiński 1998; Skillen et al. 1997:80. (**ds**) Bain 1999; Furniss & Johnson 1995:337; Lavoie, Elias, & Filion 1997:398; Miller, R.F. 1997; Rykken & Hanson 1999:20. (**hb**) Bowers, Borden, & Raske 1996a, 1996b; Furniss & Johnson 1995:337; Peck, Equihua-Martinez, & Ross 1997:207; Rykken & Hanson 1999:20.

Page 298 ***sachalinensis*** Eggers. Add:
DISTRIBUTION: ASIA: China (Heilongjiang).
HOSTS: *Picea jezonensis*.
REFERENCES: (**ds**) Kulinich & Orlinskii 1998. (**ec**) Yang 1996:313.

Page 299 ***seriatus*** Reitter. Add:
REFERENCES: (**ds**) Yanovskii 1999:336. (**tx**) Yanovskii 1999:336.

Page 299 ***shariensis*** Niisima. Add:
FIGURES: Krivolutskaya 1996a:340 (antenna).
REFERENCES: (**ds**) Krivolutskaya 1996a:340. (**tx**) Krivolutskaya 1996a:340.

Page 299 ***sinensis*** Eggers. Add:
REFERENCES: (**ec**) Chen et al. 1999. (**hb**) Chen et al. 1999.

Page 299 *squameus* Yin & Huang. Move to ***rudis*** Eggers as a synonym. Add:
SYNONYMY: Yin & Huang 1996:348.
REFERENCES: (**ec**) Yang 1996:300.

Page 299 ***squamulatus*** Niisima. Add:
REFERENCES: (**ds**) Yanovskii 1999:336. (**tx**) Yanovskii 1999:336.

Page 299 ***ssiori*** Niisima. Add:
FIGURES: Krivolutskaya 1996a:340 (antenna).
REFERENCES: (**ds**) Krivolutskaya 1996a:340; Yanovskii 1999:336. (**tx**) Krivolutskaya 1996a:340; Yanovskii 1999:336.

Page 300 ***subopacus*** Thomson. Add:
FIGURES: Krivolutskaya 1996a:339 (antenna); Voolma, Õunap, & Süda 1997b:24 (antenna).
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: (**bv**) Peltonen, Heliövaara, & Väisänen 1997. (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a:339; Kulinich & Orlinskii 1998; Ponel 1995; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:24,25; Yanovskii 1999:336. (**ec**) Hedqvist 1998:77;

Jakuš 1995a, 1998b, 1998c; Martikainen et al. 1999; Peltonen, Heliövaara, & Väisänen 1997. (**hb**) Klimetzek & Schlenstedt 1991; Peltonen, Heliövaara, & Väisänen 1997. (**tx**) Krivolutskaya 1996a:339; Voolma, Õunap, & Süda 1997b:24,25; Yanovskii 1999:336.

Page 301 ***verrucifrons*** Tsai & Yin. Add:
REFERENCES: (**ec**) Chen et al. 1999. (**hb**) Chen et al. 1999.

Page 302 *zhungdianensis* Tsai & Yin. Move to ***rudis*** Eggers as a synonym. Add:
SYNONYMY: Yin & Hang 1996:348.

Add species: ***amplifolius*** Yin & Huang 1996:347. Holotype (♂); [China] Dongan County (26°4´N,111°3´E), Hunan Province; IZAC.
FIGURES: Yin & Huang 1996:347 (eye, antenna).
DISTRIBUTION: ASIA: China (Hunan).
HOSTS: *Pterocarya stenoptera*.
REFERENCES: (**ds**) Yin & Huang 1996:347. (**tx**) Yin & Huang 1996: 347.

muluensis Bright 2000:49. Holotype (♂); Malaysia, Sarawak, Gunung Mulu National Park; NHML (temporarly in CNCI).
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**tx**) Bright 2000:49.

pterocaryi Yin & Huang 1996:345. Holotype (♂); [China] Xixia County (37°3´N,120°8´E), Shandong Province; IZAC.
FIGURES: Yin & Huang 1996:346 (eye, antenna).
DISTRIBUTION: ASIA: China (Anhui, Fujian, Shandong).
HOSTS: *Pterocarya stenoptera*.
REFERENCES: (**ds**) Yin & Huang 1996:345. (**tx**) Yin & Huang 1996: 345.

querci Yin & Huang 1996:346. Holotype (♂); [China] Xishuangbanna (22°N,100°3´E), Yunnan Province; IZAC. (preoccupied).
FIGURES: Yin & Huang 1996:347 (eye, antenna).
DISTRIBUTION: ASIA: China (Yunnan).
HOSTS: *Quercus acutissima*.
NOTES: Name preoccupied by *P. querci* Wood 1988. *P. querci* Yin & Huang herein changed to *P. yunnanensis* Bright.
REFERENCES: (**ds**) Yin & Huang 1996:346. (**tx**) Yin & Huang 1996: 346.

yunnanensis Bright. New name for *P. querci* Yin & Huang, not Wood 1988.

Add subspecies: ***rudis hexiensis*** Yin & Huang 1966:348. Type information all in Chinese. Holotype evidently not designated, subspecies is possible **nomen nudum**.

Genus **Carphoborus** Eichhoff

Page 302 **Carphoborus** Eichhoff. Add:
KEYS: Krivolutskaya 1996a:337 (to East Russian species); Voolma, Õunap, & Süda 1997b:25 (to Estonian species).
REFERENCES: (**tx**) Krivolutskaya 1996a:338; Voolma, Õunap, & Süda 1997b:25.

Page 302 ***andersoni*** Swaine. Add:
REFERENCES: (**ds**) Morgan & Motz 1995.

Page 302 ***bicornis*** Wood. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:158.

Page 302 ***bifurcus*** Eichhoff. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:158.

Page 304 ***cholodkovskyi*** Spessivtsev. Add:
FIGURES: Krivolutskaya 1996a:338 (declivity); Voolma, Õunap, & Süda 1997b:25 (habitus, declivity).
DISTRIBUTION: Europe: Estonia.
REFERENCES: (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a:338; Kulinich & Orlinskii 1998; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:25, 2000:48; Yanovskii 1999:336. (**ec**) Hedqvist 1998:77. (**tx**) Krivolutskaya 1996a:338; Voolma, Õunap, & Süda 1997b:25; Yanovskii 1999:336.

Page 305 ***intermedius*** Wood. Add:
REFERENCES: (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 305 ***jurinskii*** Eggers. Add:
REFERENCES: (**ds**) Krivolutskaya 1996a:338; Kulinich & Orlinskii 1998; Yanovskii 1999:336. (**tx**) Krivolutskaya 1996a:338; Yanovskii 1999:336.

Page 305 ***minimus*** (Fabricius). Add:
REFERENCES: (**bv**) Ducauze et al. 1986. (**ds**) Kulinich & Orlinskii 1998; Öymen 1992; Ponel 1997; Riba 1996; Yanovskii 1999:336. (**tx**) Yanovskii 1999:336.

Page 307 ***perrisi*** (Chapuis). Add:
HOSTS: *Pistacia vera*.
REFERENCES: (**cn**) Mourikis, Tsourgianni, & Chizanidis 1998. (**ds**) Alekseev 1995; Öymen 1992. (**ec**) Alekseev 1995. (**hb**) Mourikis, Tsourgianni, & Chizanidis 1998.

Page 308 *kushkensis* Sokanovskii (synonym of ***perrisi*** (Chapuis)). Add:
FIGURES: Aksent'yev 1994(1995:4) (larval features).
NOTES: Treated as a valid species by Aksent'yev 1996.
REFERENCES: (**tx**) Aksent'yev 1994(1995:3).

Page 308 ***pini*** Eichhoff. Add:
REFERENCES: **(ds)** Öymen 1992; Riba 1996.

Page 308 ***pinicolens*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Baja California Sur) (see Appendix).

Page 309 ***rossicus*** Semenov. Add:
FIGURES: Holzschuh 1990a (habitus); Voolma, Õunap, & Süda 1997b:25 (habitus, declivity).
DISTRIBUTION: EUROPE: Austria.
REFERENCES: **(bv)** Holzschuh 1990a. **(ds)** Holzschuh 1995:135; Kulinich & Orlinskii 1998; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 1997b:25; Yanovskii 1999:336. **(ec)** Hedqvist 1998:77. **(tx)** Voolma, Õunap, & Süda 1997b:25; Yanovskii 1999:336.

Page 310 ***taireiensis*** Murayama. Add:
REFERENCES: **(ds)** Yanovskii 1999:337. **(tx)** Yanovskii 1999:337.

Page 310 ***teplouchovi*** Spessivtsev. Add:
REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:338; Kulinich & Orlinskii 1998; Yanovskii 1999:337. **(ec)** Hedqvist 1998:77. **(tx)** Krivolutskaya 1996a:338; Yanovskii 1999:337.

Page 310 ***vandykei*** Bruck. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: **(ds)** Furniss & Johnson 1995:336. **(hb)** Furniss & Johnson 1995:336.

Genus **Chortastus** Schaufuss

Page 311 *baguenai* (Schedl). Move to ***minimus*** Hagedorn as a synonym. Add:
NOTES: Placed as synonym of *C. agnatus* by Wood 1984; *C. agnatus* is a synonym of *C. minimus*. Synonymy omitted in 1992 catalog and 1997 supplement.
SYNONYMY: Wood 1984:224.

Page 311 ***minimus*** Hagedorn. Add baguenai (Schedl) as a synonym. Add:
REFERENCES: **(tx)** Beaver 1998c:185.

Subfamily Scolytinae Latreille

TRIBE SCOLYTINI

Genus **Cnemonyx** Eichhoff

Page 314 ***brevisetosus*** Schedl. Add:
HOSTS: *Ligustrum lucidum* (Viana 1964:129).

Page 314 ***difformis*** (Schedl). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1950:284).

Page 314 ***errans*** (Blandford). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Viana 1964:128).
HOSTS: *Myrocarpus frondosus* (Viana 1964:128).

Page 315 ***ficus*** Schwarz. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 315 ***flavicornus*** (Chapuis). Add:
HOSTS: *Sebastiania brasiliensis* (Viana 1964:129).

Page 317 ***parvus*** Nunberg. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

Page 318 ***vagabundus*** (Wood). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Genus **Camptocerus** Latreille

Page 319 ***inoblitus*** (Schedl). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina.
HOSTS: *Myrocarpus frondosus* (Viana 1964:129).

Genus **Scolytopsis** Blandford

Page 321 ***puncticollis*** Blandford. Add:
DISTRIBUTION: NORTH AMERICA: United States (Florida?).
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Genus **Scolytus** Geoffroy

Page 321 **Scolytus** Geoffroy. Add:
KEYS: Faccoli et al. 1998:188 (to Italian species); Krivolutskaya 1996a:341 (to East Russian species); Voolma, Õunap, & Süda 1997b:26 (to Estonian species).
REFERENCES: **(an)** Faccoli et al. 1998. **(bv)** Dajoz 1998. **(cn)** Bas & Selmi 1990(1992); Dajoz 1998; Zhang Miu et al. 1999. **(ds)** Abreu, Fonseca, & Marques 1997. **(ec)** Dajoz 1998; Khaustov 1998a:1139; Moller 1999. **(tx)** Faccoli et al. 1998; Krivolutskaya 1996a:341; Voolma, Õunap, & Süda 1997b:26.

Page 322 ***amygdali*** Guerin-Meneville. Add:
HOSTS: *Cydonia oblonga, Eriobotrya japonica, Malus sylverstis; Pyrus communis, P. domestica.*
REFERENCES: **(cn)** Ben Yehuda & Mendel 1997; Mendel et al. 1997. **(ds)** Alekseev 1995; Mendel et al. 1997; Öymen 1992; Ponel 1995. **(ec)** Alekseev 1995.

Page 324 ***angustatus*** Herbst. Add:
REFERENCES: **(ds)** Hansen, M. et al. 1997:92.

Page 324 ***aratus*** Blandford. Add:
REFERENCES: **(ds)** Yanovskii 1999:337. **(tx)** Yanovskii 1999:337.

Page 324 ***atratus*** Chapuis. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:346. **(tx)** Krivolutskaya 1996a:346.

Page 324 ***aztecus*** Wood. Add:
FIGURES: Cibrián et al. 1995:335 (adult, damage, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Durango).
HOSTS: *Abies durangensis, Pseudotsuga menziesii.*
REFERENCES: **(en)** Cibrián et al. 1995:334; Tkacz et al. 1998:21. **(ds)** Cibrián et al. 1995:334; Tkacz et al. 1998:21. **(hb)** Cibrián et al. 1995: 334; Tkacz et al. 1998:21.

Page 325 ***butovitschi*** Stark. Add:
FIGURES: Krivolutskaya 1996a:327 (dorsal outline, venter of abdomen).
DISTRIBUTION: ASIA: China (Beijing, Heilongjiang, Inner Mongolia, Shaanxi).
HOSTS: *Ulmus propinqua, U. pumila.*
REFERENCES: **(ds)** Krivolutskaya 1996a:341; Yanovskii 1999:337. **(ec)** Yang 1996. **(tx)** Krivolutskaya 1996a:341; Yanovskii 1999:337.

Page 325 ***carpini*** (Ratzeburg). Add:
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: **(ds)** Öymen 1992; Ponel 1995; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1997b:28, 2000:51. **(ec)** Hedqvist 1998:77. **(tx)** Voolma, Õunap, & Süda 1997b:28.

Page 327 ***chikisanii*** Niisima. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:344; Yanovskii 1999:337. **(tx)** Krivolutskaya 1996a:344; Yanovskii 1999:337.

Page 328 ***claviger*** Blandford. Add:
FIGURES: Krivolutskaya 1996a:327 (dorsal outline, venter of abdomen).
REFERENCES: **(ds)** Krivolutskaya 1996a:341,342; Yanovskii 1999:337. **(tx)** Krivolutskaya 1996a:341,342; Yanovskii 1999:337.

Page 328 ***dahuricus*** Chapuis. Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
DISTRIBUTION: ASIA: China (Heilongjiang).
HOSTS: *Betula costata, B. platyphylla.*
REFERENCES: **(ds)** Krivolutskaya 1996a:345,346; Yanovskii 1999:337. **(ec)** Yang 1996. **(tx)** Krivolutskaya 1996a:345,346; Yanovskii 1999:337.

Page 329 ***ecksteini*** Butovitsch. Add:
REFERENCES: **(ds)** Yanovskii 1999:338. **(tx)** Yanovskii 1999:338.

Page 329 ***ensifer*** Eichhoff. Add:
DISTRIBUTION: ASIA: Iran (Markazi), Turkey.
REFERENCES: **(ds)** Borumand 1998:92; Öymen 1992.

Page 330 ***esuriens*** Blandford. Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
DISTRIBUTION: ASIA: China (Heilongjiang, Shaanxi).
HOSTS: *Ulmus pumila*.
REFERENCES: **(ds)** Krivolutskaya 1996a:344; Yanovskii 1999:338. **(ec)** Yang 1996. **(tx)** Krivolutskaya 1996a:344; Yanovskii 1999:338.

Page 331 ***frontalis*** Blandford. Add:
REFERENCES: **(ds)** Yanovskii 1999:338. **(tx)** Yanovskii 1999:338.

Page 331 ***hermosus*** Wood. Add:
REFERENCES: **(cn)** Tkacz et al. 1998:21. **(ds)** Tkacz et al. 1998:21.

Page 331 ***intricatus*** (Ratzeburg). Add:
FIGURES: Dajoz 1998:412 (outline of ♀), 417 (gallery pattern).
DISTRIBUTION: ASIA: Iran (Gilān). EUROPE: Estonia, Latvia, Slovakia.
HOSTS: *Betula alba, Castanea sativa*.
REFERENCES: **(an)** Michalski 1996. **(bv)** Michalski 1996. **(cn)** Gogola et al. 1999; Patocka et al. 1999; Turčani 1998; Zúbrik et al. 1999. **(ds)** Gogola et al. 1999; Gutowski & Kubisz 1995; Haack & Cavey 1997:5; Hansen, M. 1996:212; Hansen, M. et al. 1997:147, 1998:92; Hellqvist 1999; Holecovà & Zach 1998; Lombardero 1995:362,363,364; Osborne 1996; Öymen 1992; Ponel 1995; Riba 1996; Telnov et al. 1997:134; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:28, 2000:51; Yanovskii 1999:338. **(ec)** Frigimelica, Faccoli, & Salesses 1999; Gogola et al. 1999; Haase, Topp, & Zach 1998; Hedqvist 1998:77; Khaustov 1998b; Markovic & Stojanovic 1996; Patocka et al. 1999; Ragazzi & Tiberi 1998; Šrůtka 1996; Tiberi & Ragazzi 1998. **(hb)** Gutowski & Kubisz 1995; Haase, Topp, & Zach 1998; Markalas & Kalapanida 1997. **(tx)** Voolma, Õunap, & Süda 1997b:28; Yanovskii 1999:338.

Page 334 ***jacobsoni*** (Spessivtsev). Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
REFERENCES: **(ds)** Krivolutskaya 1996a:343,348; Yanovskii 1999:338. **(tx)** Krivolutskaya 1996a:343,348; Yanovskii 1999:338.

Page 335 ***japonicus*** Chapuis. Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
DISTRIBUTION: ASIA: China (Beijing, Heilongjiang, Jiangsu, Shaanxi).
HOSTS: *Malus pumila, Prunus amygdalus, P. armeniaca, P. glandulosa, P. persica, Pyrus bretschneideri, Ulmus pumila*.
REFERENCES: **(ds)** Krivolutskaya 1996a:347; Yanovskii 1999:338. **(ec)** Yang 1996. **(tx)** Krivolutskaya 1996a:347; Yanovskii 1999:338.

Page 335 *confusus* Eggers (synonym of ***japonicus*** Chapuis). Add:
REFERENCES: **(ds)** Yanovskii 1999:337. **(ec)** Yang 1996:319. **(tx)** Yanovskii 1999:337.

Page 335 *mandli* Eggers (synonym of ***japonicus*** Chapuis). Add:
REFERENCES: **(ds)** Yanovskii 1999:339. **(tx)** Yanovskii 1999:339.

Page 335 ***jaroschewskii*** Schevyrew. Add:
FIGURES: Aksent'yev 1994(1995:2) (larval characters).
DISTRIBUTION: ASIA: Tajikistan.
HOSTS: *Eleagnus angustifolia*.
REFERENCES: **(ds)** Yanovskii 1999:338. **(tx)** Aksent'yev 1994(1995:1); Yanovskii 1999:338.

Page 336 ***kirschi*** Skalitzky. Add:
REFERENCES: **(ds)** Hastings 1998; Lombardero 1995:364; Öymen 1992; Riba 1996; Yanovskii 1999:338. **(ec)** Fursov 1997; Lindeman 1999. **(tx)** Yanovskii 1999:338.

Page 337 ***koenigi*** Schevyrew. Add:
REFERENCES: **(ds)** Yanovskii 1999:338. **(tx)** Yanovskii 1999:338.

Page 338 ***koltzei*** Reitter. Add:
FIGURES: Krivolutskaya 1996a:342 (venter of abdomen).
REFERENCES: **(ds)** Krivolutskaya 1996a:342; Yanovskii 1999:339. **(tx)** Krivolutskaya 1996a:342; Yanovskii 1999:339.

Page 339 ***laevis*** Chapuis. Add:
FIGURES: Faccoli et al. 1998:195 (habitus); Voolma, Õunap, & Süda 1997b:26 (venter of abdomen).
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: **(cn)** Lindelöw 1998b. **(ds)** Hansen, M. 1996:212; Hansen, M., Ligaard, & Sagvolden 1998; Telnov et al. 1997:134; Voolma & Mandelshtam 1998; Voolma & Süda 1999:190; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:26,28, 2000:50. **(ec)** Hedqvist 1998:77; Õunap 1999. **(tx)** Faccoli et al. 1998; Voolma, Õunap, & Süda 1997b: 26,28.

Page 340 ***laricis*** Blackman. Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 341 ***mali*** (Bechstein). Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen); Voolma, Õunap, & Süda 1997b:27 (venter of abdomen).
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: **(an)** Michalski 1996. **(bv)** Michalski 1996. **(ds)** Alekseev 1995; Hansen, M. 1996:212; Hansen, M. et al. 1996:270, 1997:147; Hastings 1998; Krivolutskaya 1996a:347,348; Lombardero 1995:363,365; Mattson et al. 1994:12; Osborne 1996:187; Öymen 1992; Ponel 1995; Telnov et al. 1997:134; Voolma & Mandelshtam 1998; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:27, 2000:50; Voolma, Süda, & Õunap 1998:76; Yanovskii 1999:

339. **(ec)** Alekseev 1995; Hedqvist 1998:77; Khaustov 1998a:1139; Õunap 1999. **(tx)** Krivolutskaya 1996a:347,348; Voolma, Õunap, & Süda 1997b:27; Yanovskii 1999:339.

Page 345 ***morawitzi*** Semenov. Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:345; Kulinich & Orlinskii 1998; Yanovskii 1999:339. **(tx)** Krivolutskaya 1996a:345; Yanovskii 1999:339.

Page 345 *pini* Eggers (synonym of ***morawitzi*** Semenov). Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998.

Page 345 ***multistriatus*** (Marsham). Add:
FIGURES: Cibrián et al. 1995:337 (adult, damage, gallery pattern); Dajoz 1998:412 (outline of ♂); Faccoli et al. 1998:191 (habitus); Hiratsuka, Langor, & Crane 1995:213 (habitus, gallery pattern, injury); Voolma, Õunap, & Süda 1997b:14 (lateral outline).
DISTRIBUTION: ASIA: Iran (Fārs, Gilān). EUROPE: Estonia, Latvia. NORTH AMERICA: Mexico (Aquascalientes, Chihuahua).
HOSTS: *Populus* sp., *Ulmus parvifolia*.
REFERENCES: **(bv)** Berens & Scharf 1995; Borden 1995c, 1997; Dajoz 1998; Kirkendall, Kent, & Raffa 1997; Nguyen et al. 1996; Skillen et al. 1997:82; Svihra 1998. **(cn)** Borden 1995c, 1997; Cibrián et al. 1995:336; Jin et al. 1996; Lindelöw 1998b; Méndez-Montiel & Equihua 1999; Nguyen et al. 1996. **(ds)** Anonymous 1994e:52, 1995:49, 1996:45; Borumand 1998:92; Cibrián et al. 1995:336; Gutowski & Kubisz 1995; Hansen, M. 1996:212; Hansen, M., Pedersen, & Pritzl 1999:101; Hansen, M. et al. 1995:47, 1996:270; Hastings 1998; Hiratsuka, Langor, & Crane 1995: 213; Kirkendall, Kent, & Raffa 1997; Lombardero 1995:364; Mattson et al. 1994:12; Méndez-Montiel & Equihua 1999; Öymen 1992; Peck & Thomas 1998:158; Podlussány 1998:304; Ponel 1995; Riba 1996; Safranyik 1995; Telnov et al. 1997:134; Voolma & Mandelshtam 1998; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:26, 2000:48. **(ec)** Faccoli & Battisti 1997; Hedqvist 1998:77; Méndez-Montiel & Equihua 1999. **(hb)** Cibrián et al. 1995:336; Gutowski & Kubisz 1995; Hiratsuka, Langor, & Crane 1995:213; Méndez-Montiel & Equihua 1999. **(tx)** Faccoli et al. 1998; Voolma, Õunap, & Süda 1997b:26.

Page 354 ***mundus*** Wood. Add:
FIGURES: Cibrián et al. 1995:331 (life cycle), 333 (adult, damage, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Distrito Federal, Hidalgo, Michoacán, Morelos, Tlaxcala).
REFERENCES: **(cn)** Cibrián et al. 1995:330; Tkacz et al. 1998:21,38. **(ds)** Cibrián et al. 1995:330; Tkacz et al. 1998:21,38. **(hb)** Cibrián et al. 1995:330; Tkacz et al. 1998:21,38.

Page 354 ***muticus*** Say. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 355 ***nodulus*** (Wichmann). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1958:36).

Page 355 *nodicornis* Wichmann (synonym of ***nodulus*** (Wichmann)). Add:
REFERENCES: **(ds)** Schedl 1958:36.

Page 355 ***numidicus*** Brisout. Add:
REFERENCES: **(hb)** Benhalima et al. 1999.

Page 355 ***nunbergi*** Michalski. Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
REFERENCES: **(ds)** Krivolutskaya 1996a:343. **(tx)** Krivolutskaya 1996a:343.

Page 355 ***opacus*** Blackman. Add:
DISTRIBUTION: NORTH AMERICA: Canada (British Columbia) (see Appendix).
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 356 ***piceae*** (Swaine). Add:
REFERENCES: **(ds)** Lavoie, Elias, & Filion 1997:398; Rykken & Hanson 1999:21. **(hb)** Peck, Equihua-Martinez, & Ross 1997:207; Rykken & Hanson 1999:21. **(tx)** Rykken & Hanson 1999:21.

Page 357 ***pubescens*** Stark. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:342; Yanovskii 1999:339. **(tx)** Krivolutskaya 1996a:342; Yanovskii 1999:339.

Page 358 ***pygmaeus*** (Fabricious). Add:
FIGURES: Faccoli et al. 1998:192 (habitus).
DISTRIBUTION: Europe: Spain, Ukraine.
REFERENCES: **(ds)** Hastings 1998; Khaustov 1998b; Öymen 1992; Riba 1996. **(ec)** Faccoli & Battisti 1997; Hedqvist 1998:77; Khaustov 1998b. **(tx)** Faccoli et al. 1998.

Page 359 ***quadrispinosus*** Say. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 361 ***ratzeburgi*** Janson. Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen); Voolma, Õunap, & Süda 1997b:26 (lateral view).
DISTRIBUTION: ASIA: China (Heilongjiang), Turkey. EUROPE: Estonia, Latvia.
REFERENCES: **(an)** Michalski 1996. **(bv)** Brattli, Anderson, & Nilssen 1998; Michalski 1996. **(cn)** Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník et al. 1995:14. **(ds)** Gutowski & Kubisz 1995; Hansen, M. 1996:212; Hansen, M. et al. 1996:270; Krivolutskaya 1996a:343; Lombardero 1995:362; Osborne 1997; Öymen 1992; Peltonen et al. 1998; Ponel 1995; Roper 1996; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:26,27, 2000:49; Yanovskii 1999:339. **(ec)** Hedqvist 1998:77; Peltonen et al. 1998; Wermlinger & v. Hirschheydt 1996. **(hb)** Gutowski & Kubisz 1995; Wermlinger & v. Hirschheydt 1996.

(tx) Krivolutskaya 1996a:343; Voolma, Õunap, & Süda 1997b:26,27; Yanovskii 1999:339.

Page 363 *amurensis* Eggers (synonym of ***ratzeburgi*** Janson). Add:
REFERENCES: **(ds)** Yang 1996:300. **(ec)** Yang 1996:300.

Page 364 ***rugulosus*** (Muller). Add:
DISTRIBUTION: ASIA: China (Xinjiang), Iran (Semnān). EUROPE: Estonia, Latvia.
HOSTS: *Crataegus monogyna, Eriobotrya japonica.*
REFERENCES: **(cn)** Mendel et al. 1997; Skiba & Parii 1989. **(ds)** Alekseev 1995; Hansen, M. 1996:212; Hansen, M. et al. 1997:147; Hastings 1998; Kenward & Hall 1995; Krivolutskaya 1996a:347; Lombardero 1995:363,365; Mattson et al. 1994:12; Mendel et al. 1997; Osborne 1997; Öymen 1992; Peck & Thomas 1998:158; Riba 1996; Smith 1998:67; Telnov et al. 1997:134; Voolma & Süda 1999:190; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:28, 2000:52; Yanovskii 1999:339. **(ec)** Alekseev 1995; Hedqvist 1998:77; Narendran, Tezcan, & Civelek 1995; Shaw 1999; Yang 1996. **(hb)** Skiba & Parii 1989. **(tx)** Krivolutskaya 1996a:347; Voolma, Õunap, & Süda 1997b:28; Yanovskii 1999:339.

Page 369 *mediterraneus* Eggers (synonym of ***rugulosus*** (Muller)). Add:
REFERENCES: **(cn)** Ben Yehuda & Mendel 1997. **(ds)** Borumand 1998: 92.

Page 370 ***schevyrewi*** Semenov. Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
DISTRIBUTION: ASIA: China (Beijing, Heilongjiang, Inner Mongolia, Shaanxi, Xinjiang).
HOSTS: Apricot trees, *Malus pumila, Prunus amygdalis, P. germanica, P. glandulosa, P. persica, Pyrus bretschneideri, Ulmus propinqua.*
REFERENCES: **(cn)** Li et al. 1995. **(ds)** Krivolutskaya 1996a:342; Yanovskii 1999:340. **(ec)** Yang 1996. **(hb)** Li et al. 1995. **(tx)** Krivolutskaya 1996a:342; Yanovskii 1999:340.

Page 371 *seulensis* Murayama (synonym of schevyrewi Semenov). Add:
REFERENCES: **(cn)** Wang et al. 1998. **(ds)** Yang 1996:300. **(ec)** Yang 1996:300. **(hb)** Wang et al. 1998.

Page 371 ***scolytus*** (Fabricius). Add:
FIGURES: Holzschuh 1991 (aedeagus, apex of abdomen); Krivolutskaya 1996a:327; Voolma, Õunap, & Süda 1997b:27 (frons, apex of abdomen).
DISTRIBUTION: EUROPE: Estonia, Latvia.
HOSTS: *Ulmus scabra.*
REFERENCES: **(bv)** Borden 1997. **(cn)** Borden 1997. **(ds)** Hansen, M. 1996:212; Hansen, M., Pedersen, & Pritzl 1999:101; Hansen, M. et al. 1995:47; Kenward & Hall 1995; Krivolutskaya 1996a:343,345; Lombardero 1995:364; Nguyen et al. 1996; Osborne 1996:187; Öymen 1992; Ponel 1995, 1997; Riba 1996; Telnov et al. 1997:134; Voolma & Mandelshtam 1998; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:27, 2000:49; Voolma, Süda, & Õunap 1998: 76; Yanovskii 1999:340. **(ec)** Manojlovic & Sivcev 1995a, 1995b. **(hb)**

Manojlovic & Sivcev 1995a. **(tx)** Holzschuh 1991; Krivolutskaya 1996a: 343,345; Voolma, Õunap, & Süda 1997b:27; Yanovskii 1999:340.

Page 376 *triarmatus* (Eggers) (listed as synonym of ***scolytus*** (Fabricius)), remove from synonymy. Add:
(tx) Brandstetter & Kapp 1998.

Page 376 ***semenovi*** (Spessivtsev). Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
DISTRIBUTION: ASIA: China (Beijing, Shaanxi).
HOSTS: *Ulmus pumila*.
REFERENCES: **(ds)** Krivolutskaya 1996a:342; Yanovskii 1999:340. **(ec)** Yang 1996. **(tx)** Krivolutskaya 1996a:342; Yanovskii 1999:340.

Page 376 ***sinopiceus*** Tsai. Add:
DISTRIBUTION: ASIA: China (Gansu).
HOSTS: *Picea crassifolia, P. wilsoni*.
REFERENCES: **(ds)** Yang 1996:300. **(ec)** Yang 1996:300.

Page 377 ***submarginatus*** Schedl. Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1958:33).

Page 377 ***sulcifrons*** Rey. Add:
FIGURES: Faccoli et al. 1998:194 (habitus); Holzschuh 1991 (aedeagus, apex of abdomen).
REFERENCES: **(tx)** Faccoli et al. 1998; Holzschuh 1991.

Page 378 ***tadzhikistanicus*** Stark. Add:
FIGURES: Aksent'yev 1994(1995:2) (larval features).
DISTRIBUTION: ASIA: Tajikstan.
REFERENCES: **(tx)** Aksent'yev 1994(1995:2).

Page 378 ***thoracicus*** Chapuis. Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Viana 1964:130).
HOSTS: *Balfourodendron reidelianum* (Viana 1964:130).

Page 378 ***trispinosus*** Strohmeyer. Add:
FIGURES: Krivolutskaya 1996a:327 (venter of abdomen).
REFERENCES: **(ds)** Krivolutskaya 1996a:344; Yanovskii 1999:340. **(tx)** Krivolutskaya 1996a:344; Yanovskii 1999:340.

Page 378 ***tsugae*** (Swaine). Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 379 ***unispinosus*** LeConte. Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 380 ***varshalovitchi*** Michalski. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:58.

Page 380 ***ventralis*** LeConte. Add:

REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997; Macías-Sámano et al. 1998a, 1998b. **(cn)** Cochran 1998. **(ds)** Kirkendall, Kent, & Raffa 1997. **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 382 ***ventrosus*** Schevyrew. Add:

REFERENCES: **(ds)** Krivolutskaya 1996a:344,346; Yanovskii 1999:340. **(tx)** Krivolutskaya 1996a:344,346; Yanovskii 1999:340.

Page 382 ***virgatus*** Bright. Add:

REFERENCES: **(cn)** Tkacz et al. 1998:21. **(ds)** Tkacz et al. 1998:21.

Add species: ***triarmatus*** Eggers (listed as synonym of ***scolytus*** (Fabricius)), remove from synonymy. Add:

FIGURES: Faccoli et al. 1998:193 (habitus); Holzschuh 1991 (aedeagus, apex of abdomen); Voolma, Õunap, & Süda 1997b:27 (frons, apex of abdomen).

DISTRIBUTION: EUROPE: Austria, Denmark, France, Norway, Slovakia, Sweden, Switzerland.

NOTES: Brandstetter & Kapp 1998 and Faccoli et al. 1998 (treats this taxon as a valid species). Removed from synonymy (Pfeffer 1994: 153–155).

REFERENCES: **(cn)** Lindelöw 1998b. **(ds)** Brandstetter & Kapp 1998; Hansen, M. 1996:212; Hansen, M. et al. 1995:48; Voolma, Õunap, & Süda 1997b:27. **(tx)** Brandstetter & Kapp 1998; Faccoli et al. 1998; Holzschuh 1991; Voolma, Õunap, & Süda 1997b:27.

TRIBE CTENOPHORINI

Genus **Pycnarthrum** Eichhoff

Page 384 ***hispidum*** (Ferrari). Add:

DISTRIBUTION: NORTH AMERICA: Dominican Republic (see Appendix).

REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 385 ***insulare*** Blair. Add:

DISTRIBUTION: SOUTH AMERICA: Ecuador (Balta, Española, Fernandina, Floreana, Genovesa, Isabela, Marchena, Santa Cruz, Seymour in Galápagos Islands).

REFERENCES: **(ds)** Bright & Peck 1998:237,249.

Genus **Gymnochilus** Eichhoff

Page 387 ***reitteri*** Eichhoff. Add:

FIGURES: Jordal 1998a:66 (antenna).

DISTRIBUTION: SOUTH AMERICA: **Tobago** (see Appendix).

REFERENCES: **(tx)** Jordal 1998a:66.

Genus **Scolytodes** Ferrari

Page 387 **Scolytodes** Ferrari. Add:
KEYS: Jordal 1998a (to Neotropical species associated with Cecropia).
REFERENCES: (**tx**) Jordal 1998a.

Page 388 ***acares*** Wood. Add:
FIGURES: Jordal 1998a:64 (habitus), 68 (♂ tergites), 69 (protibia), 70 (metatibia, procoxa).
DISTRIBUTION: Delete "Guatemala" from Distribution in 1992 catalog.
HOSTS: Petioles of *Cecropia insignis*, *C. obtusifolia*, *C. peltata*.
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal 1998a:54; Jordal & Kirkendall 1998. (**hb**) Jordal 1998a:54; Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:54.

Page 388 ***alni*** Wood. Add:
REFERENCES: (**cn**) Cornelius & Masis 1995; Cornelius et al. 1996.

Page 388 ***amoenus*** Wood. Add:
FIGURES: Jordal 1998b:409 (♀ frons).
DISTRIBUTION: NORTH AMERICA: Costa Rica.
HOSTS: *Ficus insipida*.
REFERENCES: (**ds**) Jordal 1998b:418.

Page 388 ***anceps*** Wood. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:56.

Page 388 ***atratus*** (Blandford). Add:
FIGURES: Jordal 1998a:70 (metatibia, procoxa).
HOSTS: Petioles of *Cecropia insignis*, *C. obtusifolia*, *C. peltata*, *C. polyphlebia*.
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal 1998a:38; Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:38.

Page 389 *panamensis* Wood. Move to ***atratus*** (Blandford) as a synonym.
SYNONYMY: Jordal 1998a:38.
NOTES: Jordal 1998a notes that only one variable species is present. Credits synonymy incorrectly to Wood & Bright 1992.

Page 389 ***blandfordi*** (Schedl). Add:
FIGURES: Jordal 1998a:64 (habitus), 69 (protibia).
HOSTS: Petioles of *Cecropia insignis*, *C. obtusifolia*.
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal 1998a:48; Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:48.

Page 389 ***bruchi*** (Hagedorn). Add:
HOSTS: *Alternanthera philoxeroides* var. *obtusifolia* (Viana 1964:169).

Page 390 ***cecropiavorus*** Wood. Add:
FIGURES: Jordal 1998a:64 (habitus), 68 (♂ tergites).

HOSTS: Petioles of *Cecropia obtusifolia*, *C. polyphlebia*.
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal 1998a:50; Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:50.

Page 390 ***cecropicolens*** Wood. Add:
REFERENCES: (**tx**) Jordal 1998a:43.

Page 390 ***cecropicolens acuminatus*** Wood. Elevate to species status. Add:
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:46.

Page 390 ***cecropicolens punctifer*** Wood. Elevate to species status. Add:
REFERENCES: (**tx**) Jordal 1998a:53.

Page 390 ***cecropii*** (Schedl). Add:
Lectotype (♀), Costa Rica: La Palma, La Honduras, 1450 m, 5 May 1936; NHMW, designated by Jordal 1998a:51.
HOSTS: *Cecropia mexicana* (= *C. obtusifolia*)
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal 1998a:51; Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:51.

Page 390 ***chapuisi*** Wood. Add:
FIGURES: Jordal 1998a:70 (metatibia, procoxa), 71 (aedeagus).
REFERENCES: (**ds**) Jordal 1998a:52; Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:52.

Page 392 ***festus*** Wood. Add:
REFERENCES: (**ds**) Jordal 1998a:40; Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:40.

Page 392 ***glaberescens*** Wood. Add:
FIGURES: Jordal 1998a:69 (protibia).
HOSTS: Petioles of *Cecropia obtusifolia*.
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal 1998a:40; Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:40.

Page 393 ***glabrellus*** (Schedl). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Page 393 *imitans* (Eggers). Move to ***nitidissimus*** (Eggers) as a synonym. **NEW SYNONYMY.** Add:
NOTES: Holotype is in MNHN, not in NHMW.
REFERENCES: (**ds**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:41.

Page 393 ***immanis*** Wood. Add:
FIGURES: Jordal 1998b:409 (♀ frons).
REFERENCES: (**ds**) Jordal 1998b:418.

Page 393 ***impressus*** Wood. Add:
HOSTS: *Xylopia* sp.

REFERENCES: (**ds**) Jordal 1998b:418.

Page 394 ***jucundus*** Wood. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:41.

Page 394 ***maurus*** (Blandford). Add:
FIGURES: Jordal 1998a:66 (antenna).
DISTRIBUTION: Delete "Dominica" and "Venezuela" from Distribution in 1992 catalog. Delete "Mexico (Hidalgo)" from Distribution in 1997 supplement (page 87).
HOSTS: Petioles of *Cecropia insignis, C. peltata, C. polyphlebia.*
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal 1998a:41; Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:41.

Page 395 ***nanellus*** Wood. Add:
FIGURES: Jordal 1998b:409 (♀ frons).
REFERENCES: (**ds**) Jordal 1998b:418.

Page 396 ***nitidissimus*** (Eggers). Add *imitans* Eggers as a synonyn. Add:
DISTRIBUTION: NORTH AMERICA: **Cuba** (Santiago), **Dominica** (see Appendix).
NOTES: Holotype is a ♂, not a ♀.
REFERENCES: (**ds**) Jordal 1998a:42; Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:42.

Page 396 ***obscurus*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: Costa Rica.
HOSTS: Petioles of *Cecropia obtusifolia.*
REFERENCES: (**ds**) Jordal 1998a:63. (**hb**) Jordal 1998a:63. (**tx**) Jordal 1998a:63.

Page 396 ***ochromae*** Wood. Add:
REFERENCES: (**ds**) Jordal 1998b:418.

Page 396 ***ovalis*** (Eggers). Add:
DISTRIBUTION: SOUTH AMERICA: Venezuela.
HOSTS: Petioles of *Cecropia schreberiana.*
REFERENCES: (**ds**) Jordal 1998a:45; Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:45.

Page 397 ***parvulus*** Wood. Add:
FIGURES: Jordal 1998a:69 (protibia), 70 (metatibia, procoxa).
DISTRIBUTION: Delete "Chiapas, Veracruz in Mexico" from Distribution in 1992 catalog. Delete "Mexico (Hidalgo, Oaxaca)" from Distribution in 1997 supplement (page 88).
HOSTS: Petioles of *Cecropia insignis, C. obtusifolia.*
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal 1998a:60; Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:60.

Page 397 ***perditus*** Wood. Add:
REFERENCES: (**tx**) Jordal 1998a:46.

Page 397 ***piceus*** (Blandford). Add:
FIGURES: Jordal 1998b:409 (♀ frons).
REFERENCES: (**ds**) Jordal 1998b:418. (**tx**) Jordal 1998a:52.

Page 397 ***pilifer*** Wood.
Delete "Mexico (Hidalgo)" from Distribution in 1997 supplement (page 397).

Page 397 ***pilifrons*** (Schedl). Add:
FIGURES: Jordal 1998a:66 (antenna).
HOSTS: *Cecropia* sp. branch.
REFERENCES: (**ds**) Jordal 1998a:65. (**tx**) Jordal 1998a:65.

Page 397 ***plumeriae*** Wood. Add:
FIGURES: Jordal 1998a:66 (antenna).

Page 398 ***reticulatus*** (Wood). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Page 399 ***schwarzi*** (Hopkins). Add:
REFERENCES: (**ds**) Peck & Thomas 1998:158.

Page 399 ***suturalis*** Wood. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:43.

Page 399 ***swieteniae*** (Blackman). Add:
REFERENCES: (**ds**) Jordal 1998b:418.

Page 400 ***unipunctatus*** (Blandford). Add:
DISTRIBUTION: NORTH AMERICA: Costa Rica.
HOSTS: *Cecropia* sp. trunks.
REFERENCES: (**ds**) Jordal 1998b:418.

Add species: ***acuminatus*** Wood. Move from *cecropiavorus acuminatus* Wood. Add:
FIGURES: Jordal 1998a:64 (habitus), 68 (♂ tergites).
DISTRIBUTION: NORTH AMERICA: Panama.
HOSTS: Petioles of *Cecropia insignis*, *C. obtusifolia*, *C. peltata*, *C. polyphlebia*.
REFERENCES: (**ds**) Jordal 1998a:46. (**hb**) Jordal 1998a:46. (**tx**) Jordal 1998a:46.

borealis Jordal 1998a:56. Holotype (♂): Honduras, Olancho: PN La Muralla, 14 km north of La Union, 1500 m; INBio.
FIGURES: Jordal 1998a:64 (habitus), 69 (protibia), 71 (aedeagus).
DISTRIBUTION: NORTH AMERICA: Honduras (Olancho), Mexico (Chiapas), Nicaragua (Matagalpa).
HOSTS: *Cecropia* sp. petiole.
REFERENCES: (**ds**) Jordal 1998a:56. (**tx**) Jordal 1998a:56.

caudatus Jordal 1998a:58. Holotype (♀); Costa Rica, Guanacaste: 4 km southwest of Pitilla Biological Station, Volcan Orosi, 1100 m; INBio.

FIGURES: Jordal 1998a:55,68 (♂ tergites).

DISTRIBUTION: NORTH AMERICA: Costa Rica.

HOSTS: Petioles of *Cecropia insignis, C. obtusifolia, C. peltata.*

REFERENCES: **(ds)** Jordal 1998a:58. **(tx)** Jordal 1998a:58.

circumsetosus Jordal 1998b:412. Holotype (♀); Costa Rica, Heredia Province: La Selva Biol. Sta., Puerto Viejo, 50 m; INBio.

FIGURES: Jordal 1998b:408 (outline of adult), 409 (♀ frons), 411 (antena, pro- & metatibia).

DISTRIBUTION: NORTH AMERICA: Costa Rica.

HOSTS: *Ficus* branch.

REFERENCES: **(ds)** Jordal 1998b:412. **(tx)** Jordal 1998b:412.

concavus Jordal 1998b:410. Holotype (♀); Costa Rica, Heredia Province: La Selva Biol. Sta., Puerto Viejo, 50 m; INBio.

FIGURES: Jordal 1998b:408 (outline of adult), 409 (♀ frons), 411 (protibia).

DISTRIBUTION: NORTH AMERICA: Costa Rica.

HOSTS: *Ficus hispida* branch.

REFERENCES: **(ds)** Jordal 1998b:410. **(tx)** Jordal 1998b:410.

hondurensis Jordal 1998a:44. Holotype (♀); Honduras, Cortez, Cerro Jilinico, 19 km north of Cofradia in PN Cusuco, 1650 m; INBio.

FIGURES: Jordal 1998a:44,64 (habitus), 66 (antenna), 69 (protibia), 70 (metatibia, procoxa).

DISTRIBUTION: NORTH AMERICA: Honduras.

HOSTS: *Cecropia* sp. petiole.

REFERENCES: **(ds)** Jordal 1998a:44. **(tx)** Jordal 1998a:44.

montanus Jordal 1998b:413. Holotype (♀); Costa Rica, Guanacaste Province: Monteverde, 1400 m; INBio.

FIGURES: Jordal 1998b:408 (outline of adult), 411 (antenna, pro- & metatibia).

DISTRIBUTION: NORTH AMERICA: Costa Rica.

REFERENCES: **(ds)** Jordal 1998b:413. **(tx)** Jordal 1998b:413.

nudifrons Jordal 1998b:414. Holotype (♀); Costa Rica, Puntarenas Province: OTS Sta., 5 km SW Finca Las Cruces, 1600 m; FMNH.

FIGURES: Jordal 1998b:409 (♀ frons).

DISTRIBUTION: NORTH AMERICA: Costa Rica.

REFERENCES: **(ds)** Jordal 1998b:414. **(tx)** Jordal 1998b:414.

pacificus Jordal 1998a:62. Holotype (♀); Costa Rica, Puntarenas: Isla del Coco; INBio.

FIGURES: Jordal 1998a:64 (habitus), 66 (antenna), 69 (protibia), 71 (aedeagus).

DISTRIBUTION: NORTH AMERICA: Costa Rica (Cocos Islands).

HOSTS: *Cecropia pittieri* petioles.

REFERENCES: **(ds)** Jordal 1998a:62. **(tx)** Jordal 1998a:62.

punctifer Wood. Move from *cecropiavorus punctifer* Wood. Add:
FIGURES: Jordal 1998a:66 (antenna), 68 (♀ & ♂ tergites, spermatheca), 70 (metatibia, procoxa), 71 (aedeagus).
REFERENCES: (**ds**) Jordal 1998a:53; Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:53.

punctifrons Jordal 1998b:415. Holotype (♀); Panama, Panama Province: Pr. Nat. Metropolitano; INBio.
FIGURES: Jordal 1998b:408 (outline of adult), 409 (♀ frons).
DISTRIBUTION: NORTH AMERICA: Panama.
HOSTS: *Astronium graveolens, Ficus insipida.*
REFERENCES: (**ds**) Jordal 1998b:415. (**tx**) Jordal 1998b:415.

suspectus Jordal 1998a:60. Holotype (♀); Panama, Canal Zone: Barro Colorado Island, 70 m; SLWC.
FIGURES: Jordal 1998a:55,66 (antenna), 70 (metatibia, procoxa), 71 (aedeagus).
DISTRIBUTION: NORTH AMERICA: Panama.
HOSTS: *Cecropia* sp. petioles.
REFERENCES: (**ds**) Jordal 1998a:60; Jordal & Kirkendall 1998. (**tx**) Jordal 1998a:60.

triangulus Jordal 1998b:416. Holotype (♀); Costa Rica, Heredia Province: La Selva Biol. Sta., Puerto Viejo, 50 m; INBio.
FIGURES: Jordal 1998b:409 (♀ frons), 411 (antenna, protibia).
DISTRIBUTION: NORTH AMERICA: Costa Rica.
HOSTS: *Carapa guianensis.*
REFERENCES: (**ds**) Jordal 1998b:416. (**tx**) Jordal 1998b:416.

ungulatus Jordal 1998b:417. Holotype (♀); Panama, Chiriquí Province: 2–3 km E Cerro Punta, 2000–2200 m; CNCI.
FIGURES: Jordal 1998b:408 (outline of adult), 409 (♀ frons), 411 (antenna, metatibia).
DISTRIBUTION: NORTH AMERICA: Panama.
REFERENCES: (**ds**) Jordal 1998b:417. (**tx**) Jordal 1998b:417.

TRIBE SCOLYTOPLATYPODINI

Genus **Scolytoplatypus** Schaufuss

Page 401 **Scolytoplatypus** Schaufuss. Add:
KEYS: Krivolutskaya 1996a:371 (to East Russian species).
REFERENCES: (**ds**) Krivolutskaya 1996a:371. (**tx**) Krivolutskaya 1996a:371.

Page 402 ***daimio*** Blandford. Add:
FIGURES: Krivolutskaya 1996a:372 (habitus, legs, antenna).
REFERENCES: (**ds**) Krivolutskaya 1996a:373; Yanovskii 1999:340. (**tx**) Krivolutskaya 1996a:373; Yanovskii 1999:340.

Page 402 ***darjeelingi*** Stebbing. Add:
FIGURES: Anonymous 1992a:639 (habitus, ♀ head).
REFERENCES: **(ds)** Anonymous 1992a:639. **(tx)** Anonymous 1992a: 639.

Page 402 ***eutomoides*** Blandford. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:50.

Page 403 *maculatus* Nunberg (synonym of ***fasciatus*** Hagedorn). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:58.

Page 403 ***javanus*** Eggers. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:51.

Page 404 ***mikado*** Blandford. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:372,373; Yanovskii 1999:340. **(ec)** Kajimura 1998; Kinuura 1995. **(tx)** Krivolutskaya 1996a:372,373; Yanovskii 1999:340.

Page 405 ***parvus*** Sampson. Add:
REFERENCES: **(ds)** Bright 2000:51.

Page 406 ***raja*** Blandford. Add:
FIGURES: Anonymous 1992a:639 (habitus, ♀ head).
REFERENCES: **(ds)** Anonymous 1992a:639. **(tx)** Anonymous 1992a: 639.

Page 407 ***tycon*** Blandford. Add:
REFERENCES: **(cn)** Soma et al. 1997, 1998. **(ds)** Krivolutskaya 1996a: 373; Kulinich & Orlinskii 1998; Yanovskii 1999:340. **(ec)** Kajimura 1998. **(tx)** Krivolutskaya 1996a:373; Yanovskii 1999:340.

TRIBE MICRACINI

Genus **Lanurgus** Eggers

Page 408 ***Lanurgus*** Eggers. Add:
REFERENCES: **(bv)** Ratsirarson & Silander, Jr. 1997.

Genus **Pseudothysanoes** Blackman

Page 411 *Gretschkinia* Sokanovskii (synonym of **Pseudothysanoes** Blackman). Add:
REFERENCES: **(tx)** Krivolutskaya 1996a:348.

Page 413 ***dimorphus*** (Schedl). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Page 413 ***dislocatus*** (Blackman). Add:
DISTRIBUTION: NORTH AMERICA: Dominican Republic (see Appendix).
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 415 ***mongolica*** (Sokanovskii). Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:349; Yanovskii 1999:341. **(tx)** Krivolutskaya 1996a:349; Węgrzynowicz & Mokrzycki 1996:55; Yanovskii 1999:341.

Page 415 ***multispinatus*** Wood. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 415 ***peniculus*** Wood. Add:
HOSTS: *Phorandendron velutinum* (see Appendix).

Page 415 ***phoradendri*** Blackman. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 417 ***securigerus*** (Blackman). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 417 *spinatifer* Wood. Add:
NOTES: Unjustified replacement name for *P. spinatus* Wood 1956, not Schedl 1951.
REFERENCES: **(tx)** Beaver 1998c:181.

isolatus Bright & Peck 1998:238. Holotype ♂; ECU[ADOR] : Galap., Floreana, Fuica (sic) Cruz, 130 m; CNCI.
DISTRIBUTION: SOUTH AMERICA: Ecuador (Floreana, Pinta in Galápagos Islands).
REFERENCES: **(ds)** Bright & Peck 1998:238, 249. **(tx)** Bright & Peck 1998:238.

spinatulus Wood. Add:
NOTES: (1) Justified replacement name for *P. spinatus* Wood 1956, not Schedl 1951. (2) Omitted from 1992 catalog and 1997 supplement.
REFERENCES: **(tx)** Beaver 1998c:181.

Genus **Thysanoes** LeConte

Page 419 ***berchemiae*** Blackman. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:159.

Page 420 ***fimbricornis*** LeConte. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:159.

Page 420 ***lobdelli*** Blackman. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:159.

Page 420 ***pallens*** Wood. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:159.

Genus **Hylocurus** Eichhoff

Page 423 ***cancellatus*** Blandford.
Delete "Mexico (Chiapas, Oaxaca)" from Distribution in 1997 supplement (page 96).

Page 423 ***carinifrons*** Atkinson. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 424 ***dimorphus*** (Schedl). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Viana 1964:126).

Page 425 ***flaglerensis*** Blackman. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 425 ***floridensis*** Atkinson. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 425 ***impar*** Schedl. Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1950:284).

Page 426 ***intermedius*** Schedl. Add:
HOSTS: *Acacia bonariensis* (Viana 1964:126).

Page 426 ***langstoni*** Blackman. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Page 426 ***microcornis*** Wood. Add:
FIGURES: Cibrián et al. 1995:431 (adults, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Chiapas).
HOSTS: *Pinus* spp., *Quercus* spp.
REFERENCES: **(cn)** Cibrián et al. 1995:430. **(ds)** Cibrián et al. 1995: 430. **(hb)** Cibrián et al. 1995:430.

Page 426 ***pilosus*** Schedl. Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Viana 1964:126).
HOSTS: *Guada angustifolia* (Viana 1964:126).

Page 427 ***robustus*** Schedl. Add:
HOSTS: *Bignonia unquiscati* (Viana 1964:126).

Page 428 ***subgranulatus*** Schedl. Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64.

Page 428 ***torosus*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: United States (Oklahoma, Texas) (see Appendix).

Page 428 ***vianai*** Schedl. Add:
HOSTS: *Gleditsia triacanthos* (Viana 1964:126).

Genus **Micracisella** Blackman

Page 433 ***nanula*** (LeConte). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

Genus **Micracis** LeConte

Page 433 ***carinulatus*** Wood. Add:
REFERENCES: **(ec)** Dajoz 1997.

Page 433 ***longula*** Nunberg. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

Page 433 ***swainei*** Blackman. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:158.

TRIBE CACTOPININI

Genus **Cactopinus** Schwarz

Page 435 ***hubbardi*** Schwarz. Add:
REFERENCES: **(ds)** Hall et al. 1989:328.

TRIBE CARPHODICTICINI

Page 437 Tribe Carphodicticini. Move entire tribe to Platypodidae as a subfamily. Add:
REFERENCES: **(tx)** Thompson 1992.

TRIBE IPINI

Genus **Pityogenes** Bedel

Page 438 **Pityogenes** Bedel. Add:
KEYS: Krivolutskaya 1996a:352 (to East Russian species); Voolma, Õunap, & Süda 1997b:28 (to Estonian species).
REFERENCES: **(tx)** Krivolutskaya 1996a:352; Voolma, Õunap, & Süda 1997b:28.

Page 439 ***bidentatus*** (Herbst). Add:
FIGURES: Krivolutskaya 1996a:323 (declivity); Lombardero 1998:57 (aedeagus); Voolma, Õunap, & Süda 1997b:29 (declivity).
DISTRIBUTION: EUROPE: Estonia, Latvia.
HOSTS: *Pseudotsugae menziesii*.
REFERENCES: **(an)** Lombardero 1998:57. **(bv)** Luterek 1996. **(cn)** Luterek 1996; Roversi et al. 1995; Wermlinger et al. 1999. **(ds)** Gutowski &

Kubisz 1995; Haack & Cavey 1997:5; Hansen, M. 1996:211; Hansen, M. et al. 1997:147; Hastings 1998; Kido & Azuma 1995; Krivolutskaya 1996a:353,355; Kulinich & Orlinskii 1998; Mattson et al. 1994:12; Osborne 1997; Öymen 1992; Peltonen et al. 1998; Ponel 1995; Riba 1996; Sippola, Siitonen, & Kallio 1995; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:29, 2000:54; Whitehouse 1997a; Yanovskii 1999:341. **(ec)** Amezaga & Rodriguez 1998; Bakke 1996; Hedqvist 1998:79; Martikainen et al. 1999; Mokrzycki 1995a; Peltonen et al. 1998; Wermlinger et al. 1999. **(hb)** Amezaga & Rodriguez 1998; Gutowski & Kubisz 1995; Martikinen et al. 1996. **(tx)** Krivolutskaya 1996a:353,355; Voolma, Õunap, & Süda 1997b:29; Yanovskii 1999:341.

Page 442 ***bistridentatus*** (Eichhoff). Add:

FIGURES: Holzschuh & Perny 1996:7 (elytral declivity); Lombardero 1998:57 (aedeagus).

HOSTS: *Pinus uncinatus*.

REFERENCES: **(an)** Lombardero 1998:58. **(cn)** Cech & Krehan 1997; Cech & Tomiczek 1996. **(ds)** Haack & Cavey 1997:5; Haack et al. 1997; Lakatos 1999c; Öymen 1992; Riba 1996. **(ec)** Khaustov 1998a:1141. **(tx)** Holzschuh & Perny 1996:6.

Page 444 *herbellae* Strohmeyer (synonym of ***bistridentatus*** (Eichhoff)). Move to ***bidentatus*** (Herbst) as a synonym. Add:

NOTES: Holotype is in NHMW.

REFERENCES: **(tx)** Beaver 1998c:185.

Page 444 ***calcaratus*** (Eichhoff). Add:

FIGURES: Lombardero 1995:360 (gallery pattern), 1998:57 (aedeagus).

HOSTS: *Cedrus deodara*.

REFERENCES: **(an)** Lombardero 1998:58. **(bv)** Markalas 1997. **(ds)** Lombardero 1995:358–361; Markalas 1997:59; Riba 1996; Whitehead 1997.

Page 445 ***carinulatus*** (LeConte). Add:

REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 445 ***chalcographus*** (Linnaeus). Add:

FIGURES: Dajoz 1998:412 (habitus); Krivolutskaya 1996a:323 (declivity); Lombardero 1998:57 (aedeagus); Voolma, Õunap, & Süda 1997b:28 (declivity), 29 (frons); Zahradník 1997 (adult, habitus, gallery pattern).

DISTRIBUTION: ASIA: China (Heilongjiang). EUROPE: Estonia, Latvia, Spain.

HOSTS: *Picea jezonensis*.

REFERENCES: **(an)** Lombardero 1998:59; Simsek 1995. **(bv)** Baier, Bader, & Rosner 1999; Brutovsky 1996; Byers, Qing-He Zhang, & Schlyter 1998; Diminic et al. 1996; Ducauze et al. 1986; Jakuš 1995b, 1998a, 1998b, 1998c; Jakuš & Dudova 1999; Kolomiets & Bogdanova 1998; Lakatos 1999b; Lobinger & Skatulla 1996; Luterek 1996; Mihalciuc, Mircioiu, & Bujila 1998; Nicolai 1997; Niemeyer & Watzek

1996; Peltonen, Heliövaara, & Väisänen 1997; Pfister 1997; Schmidt, Schmidt, & Fisher 1997; Schmidt, Schmidt, & Mucha 1999; Starzyk 1996; Valkama, Räty, & Niemelä 1997; Zahradník 1997; Zumr & Šebek 1997. **(cn)** Babuder & Pohleven 1995c; Bajwa, Kehr, & Zimmerman 1994; Brutovsky 1996; Cech & Krehan 1997; Diminic et al. 1996; Dubbel 1993; Dubbel & Vaupel 1996; Ehnström, Långström, & Hellqvist 1995; Federov et al. 1998; Gavrilovic & Korpic 1992; Grodzki 1998a; Grodzki, Kolk, & Stocki 1997; Habermann & Hartmann 1997; Hrašovec 1995; Hrašovec & Harapin 1999; Jakuš 1995b; Jakuš & Dudova 1999; Klimetzek & Yue 1997; Knížek & Zahradník 1999; Knížek, Zahradník, & Liška 1998; Kolk & Sierpiński 1998, 1999; Koltay 1998; Lakatos 1997; Leontovyč, Turčani, & Zúbrik 1999; Luterek 1996; Mihalciuc 1997; Mihalache, Mihalciuc, & Ciornei 1997; Mihalciuc, Mircioiu, & Bujila 1998; Niemeyer 1996; Niemeyer & Watzek 1996; Pavlin 1992; Pfister 1996, 1997; Scholz & Wulf 1998; Simionescu 1995; Šrůtka, Liška, & Kapitola 1998; Starzyk 1996:30; Turčani 1998; Watzek & Niemeyer 1996; Wermlinger et al. 1999; Zahn 1999; Zahradník 1997, 1998a, 1998b; Zahradník & Šrůtka 1997; Zúbrik et al. 1999; Zumr & Šebek 1997. **(ds)** Gutowski & Kubisz 1995; Haack & Cavey 1997:5; Haack et al. 1997; Hansen, M. 1996:211; Hastings 1998; Hellqvist 1999; Holzschuh & Perny 1996:5; Jakuš 1998a, 1998b, 1998c; Kido & Azuma 1995; Krivolutskaya 1996a: 353,354; Kulinich & Orlinskii 1998; Lakatos 1999c; Öymen 1992; Peltonen et al. 1998; Ponel 1995; Riba 1996; Simionescu 1995; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996: 129, 1997a:21, 1997b:28, 2000:52; Yanovskii 1999:341. **(ec)** Bajwa, Kehr, & Zimmerman 1994; Bakke 1996; Coelin, Niu, & Führer 1996; Dippel 1996; Dippel et al. 1997; Ehnström, Långström, & Hellqvist 1995; Federov et al. 1998; Grodzki 1997a; Haidler, Wegensteiner, & Weiser 1998; Haidler et al. 1998; Hedqvist 1998:78; Jakuš 1995a, 1995b, 1998b, 1998c, 1998d; Klimetzek & Yue 1997; Kolomiets & Bogdanova 1998; Krokene & Solheim 1996; Kula & Ząbecki 1997a, 1997b, 1998, 1999a, 1999b; Lobinger & Feicht 1999; Lobinger & Skatulla 1996; Martikainen et al. 1999; Mokrzycki 1995a; Nicolai 1995a, 1996; Õunap 1999; Pavlin 1991; Peltonen, Heliövaara, & Väisänen 1997; Peltonen et al. 1998; Thiel 1999; Wermlinger et al. 1995, 1999; Wigger 1996; Yang 1996; Zahradník 1997. **(hb)** Gutowski & Kubisz 1995; Klimetzek & Schlenstedt 1991; Kula & Ząbecki 1999a; Lobinger & Skatulla 1996; Nicolai 1995b, 1996, 1997; Peltonen, Heliövaara, & Väisänen 1997; Schroeder et al. 1999; Wigger 1996; Zahradník 1997. **(ms)** Tochtermann 1996. **(tx)** Krivolutskaya 1996a:353,354; Voolma, Õunap, & Süda 1997b:28; Yanovskii 1999:341.

Page 451 ***conjunctus*** Reitter. Add:

FIGURES: Holzschuh & Perny 1996:7 (elytral declivity).

REFERENCES: **(cn)** Wermlinger et al. 1999. **(ds)** Holzschuh & Perny 1996:5; Krivolutskaya 1996a:354,355; Kulinich & Orlinskii 1998; Yanovskii 1999:341. **(ec)** Wermlinger et al. 1999. **(tx)** Holzschuh & Perny 1996:6; Krivolutskaya 1996a:353,354; Yanovskii 1999:341.

Page 451 ***fossifrons*** (LeConte). Add:
REFERENCES: (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 451 ***foveolatus*** Eggers. Add:
REFERENCES: (**ds**) Krivolutskaya 1996a:354; Kulinich & Orlinskii 1998; Yanovskii 1999:342. (**tx**) Krivolutskaya 1996a:354; Yanovskii 1999:342.

Page 452 ***hopkinsi*** Swaine. Add:
REFERENCES: (**ds**) Lavoie, Elias, & Filion 1997:398; Rykken & Hanson 1999:22. (**hb**) Rykken & Hanson 1999:22. (**tx**) Rykken & Hanson 1999:22.

Page 452 ***irkutensis*** Eggers. Add:
REFERENCES: (**cn**) Bogdanova 1998. (**ds**) Krivolutskaya 1996a: 353, 355; Kulinich & Orlinskii 1998; Öymen 1992; Yanovskii 1999:342. (**ec**) Bogdanova 1998; Hedqvist 1998:78. (**tx**) Krivolutskaya 1996a: 353,355; Yanovskii 1999:342.

Page 453 ***japonicus*** Nobuchi. Add:
HOSTS: *Pinus armandi*.
REFERENCES: (**ec**) Chen et al. 1999. (**hb**) Chen et al. 1999.

Page 453 ***knechteli*** Swaine. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: (**bv**) Savoie et al. 1998; Skillen et al. 1997:79. (**ds**) Furniss & Johnson 1995. (**hb**) Furniss & Johnson 1995; Peck, Equihua-Martinez, & Ross 1997:207.

Page 455 ***quadridens*** (Hartig). Add:
FIGURES: Krivolutskaya 1996a:323 (declivity); Lombardero 1998:57 (aedeagus); Voolma, Õunap, & Süda 1997b:29 (declivity).
DISTRIBUTION: ASIA: Turkey. EUROPE: Estonia, Latvia.
REFERENCES: (**an**) Lombardero 1998:59. (**bv**) Brattli, Anderson, & Nillsen 1998; Peltonen, Heliövaara, & Väisänen 1997. (**cn**) Tsankov, Mirchev, & Tomovsky 1999. (**ds**) Gutowski & Kubisz 1995; Hastings 1998; Krivolutskaya 1996a:353,355; Kulinich & Orlinskii 1998; Peltonen et al. 1998; Riba 1996; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:29, 2000:53; Whitehouse 1997a, 1997b; Yanovskii 1999:342. (ec) Bakke 1996; Ehnström, Långström, & Hellqvist 1995; Hedqvist 1998:78; Martikainen et al. 1999; Mokrzycki 1995a; Õunap 1999; Peltonen, Heliövaara, & Väisänen 1997; Peltonen et al. 1998. (**hb**) Gutowski & Kubisz 1995; Peltonen, Heliövaara, & Väisänen 1997; Tsankov, Mirchev, & Tomovsky 1999. (**tx**) Krivolutskaya 1996a: 353,355; Voolma, Õunap, & Süda 1997b:29; Yanovskii 1999:342.

Page 457 ***rudnevi*** Sokanovskii. Add:
REFERENCES: (**ds**) Krivolutskaya 1996a:353,354; Kulinich & Orlinskii 1998; Yanovskii 1999:342. (**tx**) Krivolutskaya 1996a:353,354; Yanovskii 1999:342.

Page 457 ***saalasi*** Eggers. Add:

REFERENCES: (**ds**) Kulinich & Orlinskii 1998; Sippola, Siitonen, & Kallio 1995; Yanovskii 1999:342. (**ec**) Hedqvist 1998:78; Yanovskii 1999:342.

Page 458 ***seirindensis*** Murayama. Add:

REFERENCES: (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a: 353,354; Yanovskii 1999:342. (**tx**) Krivolutskaya 1996a:353,354; Yanovskii 1999:342.

Page 458 *aizawai* Kono (synonym of ***seirinensis*** Murayama). Add:

REFERENCES: (**ds**) Kulinich & Orlinskii 1998.

Page 458 *nitidus* Eggers (synonym of ***seirindensis*** Murayama). Add:

REFERENCES: (**ds**) Yanovskii 1999:342. (**tx**) Yanovskii 1999:342.

Page 458 ***trepanatus*** (Nordlinger). Add:

FIGURES: Lombardero 1998:57 (aedeagus); Voolma, Õunap, & Süda 1997b:29 (declivity, frons).

DISTRIBUTION: EUROPE: Estonia, Latvia.

HOSTS: *Pinus pinea*.

REFERENCES: (**an**) Lombardero 1998:59. (**ds**) Hansen, M. et al. 1996:270, 1997:92; Kulinich & Orlinskii 1998; Lombardero 1995: 359,360; Ponel 1995; Riba 1996; Telnov et al. 1997:134; Voolma & Mandelshtam 1998; Voolma & Süda 1999:190; Voolma, Õunap, & Süda 1996: 129, 1997a:21, 1997b:29, 2000:53. (**ec**) Hedqvist 1998:78; Mokrzycki 1995a. (**tx**) Voolma, Õunap, & Süda 1997b:29.

Genus **Pityokteines** Fuchs

Page 459 **Pityokteines** Fuchs. Add:

REFERENCES: (**cn**) Grodzki 1998a; Zahn 1999. (**hb**) Dajoz 1998:445. (**tx**) Krivolutskaya 1996a:355; Voolma, Õunap, & Süda 1997b:29.

Page 460 ***curvidens*** (Germar). Add:

FIGURES: Dajoz 1998:413 (habitus), 447 (gallery pattern); Krivolutskaya 1996a:323 (declivity); Voolma, Õunap, & Süda 1997b:19 (declivity).

DISTRIBUTION: EUROPE: Latvia.

REFERENCES: (**bv**) Borden 1997; Dajoz 1998:446. (**cn**) Borden 1997; Dajoz 1998:445; Grodzki, Kolk, & Stocki 1997; Kolk & Sierpiński 1998, 1999; Mihalache, Mihalciuc, & Ciornei 1997; Öymen 1992; Simionescu 1995. (**ds**) Krivolutskaya 1996a:355; Kulinich & Orlinskii 1998; Öymen 1992; Ponel 1995; Riba 1996; Simionescu 1995; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1997b:29; Yanovskii 1999:343. (**hb**) Dajoz 1998:445. (**tx**) Krivolutskaya 1996a:355; Voolma, Õunap, & Süda 1997b:29; Yanovskii 1999:343.

Page 462 ***elegans*** Swaine. Add:

REFERENCES: (**bv**) Macías-Sámano et al. 1997. (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 463 ***ornatus*** (Swaine). Add:
REFERENCES: (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 464 ***sparsus*** (LeConte). Add:
REFERENCES: (**ds**) Bain 1999; Rykken & Hanson 1999:23. (**hb**) Rykken & Hanson 1999:23. (**tx**) Rykken & Hanson 1999:23.

Page 465 ***spinidens*** (Reitter). Add:
DISTRIBUTION: EUROPE: Spain.
REFERENCES: (**bv**) Diminic et al. 1996. (**cn**) Diminic et al. 1996; Hrašovec & Harapin 1999. (**ds**) Hastings 1998; Öymen 1992; Ponel 1995; Riba 1996. (**ec**) Weiser, Wegensteiner, & Žižka 1995.

Page 466 ***vorontzowi*** (Jacobson). Add:
REFERENCES: (**bv**) Dajoz 1998:446. (**ds**) Hastings 1998; Öymen 1992; Ponel 1995; Riba 1996. (**hb**) Dajoz 1998:446.

Add species: ***marketae*** Knížek 1998b:189. Holotype (♂); TR-Prov. Mersin, Camliyayla, 1000–1200 m; MNHN.
FIGURES: Knížek 1998b:191 (habitus).
DISTRIBUTION: ASIA: Turkey.
HOSTS: *Abies cilicica*.
REFERENCES: (**tx**) Knížek 1998b:189.

Genus **Orthotomicus** Ferrari

Page 467 **Orthotomicus** Ferrari. Add:
KEYS: Krivolutskaya 1996a:356 (to East Russian species); Voolma, Õunap, & Süda 1997b:30 (to Estonian species).
REFERENCES: (**tx**) Krivolutskaya 1996a:356; Voolma, Õunap, & Süda 1997b:30.

Page 467 ***angulatus*** (Eichhoff). Add:
REFERENCES: (**an**) Lyal & King 1996. (**bv**) Lyal & King 1996. (**ds**) Yanovskii 1999:343. (**tx**) Yanovskii 1999:343.

Page 467 ***caelatus*** (Eichhoff). Add:
REFERENCES: (**an**) Page et al. 1997. (**bv**) Flechtmann, Dalusky, & Berisford 1999; Safranyik, Shore, & Linton 1999. (**ds**) Bain 1998:39, 1999; Peck & Thomas 1998:159; Rykken & Hanson 1999:24. (**hb**) Peck, Equihua-Martinez, & Ross 1997:207; Rykken & Hanson 1999:24. (**tx**) Page et al. 1997; Rykken & Hanson 1999:24.

Page 106S ***erosus*** (Wollaston). Add:
FIGURES: Anonymous 1992a:635 (declivity); Dajoz 1998:311 (gallery pattern).
DISTRIBUTION: ASIA: China (Hunan), Iran (Gilān, Tehrān), Turkey. EUROPE: Italy.
HOSTS: *Pinus armandi, P. eldarcia.*
REFERENCES: (**bv**) Borden 1997; Ducauze et al. 1986; Lieutier, Vouland, & Hewitt 1997; Markalas 1997. (**cn**) Borden 1997; Öymen 1992;

Ozkazanc 1985. (**ds**) Anonymous 1992a:635; Bordoni 1995:43; Borumand 1998:93; Haack & Cavey 1997:5; Haack et al. 1997; Hastings 1998; Lombardero 1995:358–361; Öymen 1992; Riba 1996; Waterhouse 1997:44,48. (**ec**) Amezaga & Rodriguez 1998; Swart & Heyns 1997; Yang 1996. (**hb**) Amezaga & Rodriguez 1998; Ozkazanc 1985. (**tx**) Anonymous 1992a:635; Stauffer, Lakatos, & Hewitt 1997.

Page 469 ***golovjankoi*** Pjatnitskii. Add:
FIGURES: Krivolutskaya 1996a:323 (declivity).
DISTRIBUTION: ASIA: China (Heilongjiang).
HOSTS: *Picea koraiensis*.
REFERENCES: (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a:357; Kulinich & Orlinskii 1998. (**ec**) Yang 1996. (**tx**) Krivolutskaya 1996a:357.

Page 469 ***laricis*** (Fabricius). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:31 (declivity).
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: (**cn**) Wermlinger et al. 1999. (**ds**) Gutowski & Kubisz 1995; Haack & Cavey 1997:5; Hansen, M., Pedersen, & Pritzl 1999:100; Hastings 1998; Kido & Azuma 1995; Krivolutskaya 1996a:357; Kulinich & Orlinskii 1998; Lakatos 1999c; Lemdahl 1997; Lombardero 1995:359–361; Öymen 1992; Peltonen et al. 1998; Ponel 1995; Riba 1996; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:31, 2000:56; Yanovskii 1999:343. (**ec**) Hedqvist 1998:79; Khaustov 1999; Kirschner & Oberwinkler 199b; Mokrzycki 1995a; Peltonen et al. 1998; Wermlinger et al. 1999. (**hb**) Gutowski & Kubisz 1995. (**tx**) Krivolutskaya 1996a:357; Voolma, Õunap, & Süda 1997b:30; Yanovskii 1999:343.

Page 472 ***longicollis*** (Gyllenhal). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:30 (declivity).
DISTRIBUTION: EUROPE: Estonia, Latvia, Russia (Karelia).
REFERENCES: (**bv**) Markalas 1997. (**cn**) Cech & Krehan 1997; Deledicque 1998; Markalas 1997:59; Riba 1996; Siitonen et al. 1996:71; Telnov et al. 1997:134. (**ds**) Eichler, Esser, & Pütz 1999:215; Gutowski & Kubisz 1995; Kulinich & Orlinskii 1998; Öymen 1992; Siitonen et al. 1996; Voolma & Mandelshtam 1998; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1997a:21, 1997b:30, 2000:54; Voolma, Süda, & Õunap 1998:76. (**ec**) Hedqvist 1998:79. (**hb**) Gutowski & Kubisz 1995. (**tx**) Voolma, Õunap, & Süda 1997b:30.

Page 473 ***pinivora*** Schedl. Add:
REFERENCES: (**ds**) Öymen 1992.

Page 473 ***proximus*** (Eichhoff). Add:
FIGURES: Krivolutskaya 1996a:323 (declivity); Voolma, Õunap, & Süda 1997b:31 (declivity).
DISTRIBUTION: EUROPE: Estonia, Latvia.

REFERENCES: (**bv**) Kolomiets & Bogdanova 1998. (**cn**) Bogdanova 1998; Koltay 1998. (**ds**) Hellqvist & Lemdahl 1996; Kido & Azuma 1995; Krivolutskaya 1996a:357; Kulinich & Orlinskii 1998; Lakatos 1999c; Öymen 1992; Podlussány 1998:303; Riba 1996; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:30,31, 2000:55; Yanovskii 1999:343. (**ec**) Bakke 1996; Bogdanova 1998; Kolomiets & Bogdanova 1998; Hedqvist 1998:79; Mokrzycki 1995a; Õunap 1999. (**tx**) Krivolutskaya 1996a:357; Voolma, Õunap, & Süda 1997b:30,31; Yanovskii 1999:343.

Page 106S. ***robustus*** (Knotek). Add:

REFERENCES: (**ds**) Lakatos 1999c; Podlussány 1998:304.

Page 473 ***starki*** Spessivtsev. Add:

FIGURES: Krivolutskaya 1996a:323 (declivity); Voolma, Õunap, & Süda 1997b:30 (declivity).

REFERENCES: (**ds**) Krivolutskaya 1996a:356; Kulinich & Orlinskii 1998; Voolma, Õunap, & Süda 1997b:30; Yanovskii 1999:343. (**ec**) Kula & Ząbecki 1999a, 1999b. (**tx**) Krivolutskaya 1996a:356; Voolma, Õunap, & Süda 1997b:30; Yanovskii 1999:343.

Page 476 ***suturalis*** (Gyllenhal). Add:

FIGURES: Krivolutskaya 1996a:323 (declivity); Voolma, Õunap, & Süda 1997b:31 (declivity).

DISTRIBUTION: ASIA: Turkey. EUROPE: Estonia, Latvia.

NOTES: Delete Belgium (see Deledicque 1998).

REFERENCES: (**bv**) Kolomiets & Bogdanova 1998. (**ds**) Deledicque 1998; Gutowski & Kubisz 1995; Kido & Azuma 1995; Krivolutskaya 1996a:357; Kulinich & Orlinskii 1998; Lemdahl 1997; Lombardero 1995:361; Öymen 1992; Peltonen et al. 1998; Podlussány 1998:304; Ponel 1995; Telnov et al. 1997:134; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:30, 2000:55; Yanovskii 1999:343. (**ec**) Bakke 1996; Hedqvist 1998:79; Jakuš 1995a; Kolomiets & Bogdanova 1998; Mokrzycki 1995a; Peltonen et al. 1998. (**hb**) Gutowski & Kubisz 1995. (**tx**) Krivolutskaya 1996a:357; Voolma, Õunap, & Süda 1997b:30; Yanovskii 1999:343.

Genus **Acanthotomicus** Blandford

Page 480 *denticulus* (Eggers). Move to ***perexiguus*** (Blandford) as a synonym. Add:

SYNONYMY: Schedl 1969:101.

NOTES: Synonymy omitted in 1992 catalog and 1997 supplement.

Page 480 ***emarginatus*** Browne. Add:

REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:15.

Page 481 *fici* Browne. Add:

REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:15.

Page 481 ***grandis*** Browne. Add:

REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:16.

Page 482 ***octodentatus*** Browne. Add:

REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:17.

Page 482 ***perexiguus*** (Blandford). Add *denticulus* (Eggers) as a synonym. Add:

REFERENCES: (**tx**) Beaver 1998c:186; Schedl 1969:101.

Page 482 *philippinensis* Eggers (synonym of ***perexiguus*** (Blandford)). Add:

REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:56.

Page 483 ***sindorae*** Browne. Add:

REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:18.

Add species: ***similis*** Bright 2000:52. Holotype (sex?); Malaysia, Sarawak, Gunung Mulu National Park; NHML (temporarily in CNCI).

FIGURE: Bright 2000:77 (outline of elytral declivity).

DISTRIBUTION: ASIA: Malaysia (Sarawak).

REFERENCES: (**tx**) Bright 2000:52.

Genus **Ips** DeGeer

Page 484 **Ips** DeGeer. Add:

KEYS: Cibrián et al. 1995:301 (to Mexican species); Krivolutskaya 1996a:355 (to East Russian species); Rykken & Hanson 1999:25 (to species in northeastern United States); Voolma, Õunap, & Süda 1997b:32 (to Estonian species).

REFERENCES: (**an**) Cognato & Sperling 1998; Stauffer 1997a, 1999. (**cn**) EPPO/CABI 1992:177; Fredericksen, Hedden, & Williams 1995; Ilse & Hellgren 1999; Jakuš 1995b. (**ds**) Bain 1999; EPPO/CABI 1992:177; Rykken & Hanson 1999:25. (**ec**) EPPO/CABI 1992:177; Harrington et al. 1996; Posada F. & Vélez 1997; Storer, Wood, & Gordon 1999; Voolma, Õunap, & Süda 1997b:32. (**hb**) EPPO/CABI 1992:177; Rykken & Hanson 1999:25. (**ms**) Chevtchouk, Isakov, & Kulinkovich 1999. (**tx**) Cibrián et al. 1995:300–301; Cognato & Sperling 1998, 2000; Cognato et al. 1997; Krivolutskaya 1996a:355; Page et al. 1997; Rykken & Hanson 1999:25; Stauffer 1997a; Voolma, Õunap, & Süda 1997b:32.

Page 485 ***acuminatus*** (Gyllenhal). Add:

FIGURES: Anonymous 1992a:634 (declivity); Dajoz 1998:444 (gallery pattern); Krivolutskaya 1996a:323 (declivity); Voolma, Õunap, & Süda 1997b:32 (declivity).

DISTRIBUTION: ASIA: China (Gansu, Henan, Heilongjiang, Hunan, Shaanxi), Taiwan. EUROPE: Estonia, Latvia.

HOSTS: *Pinus armandi, P. koraiensis, P. sylvestris var. mongolica, P. tabulaeformis.*

REFERENCES: (**an**) Gehrken 1995; Stauffer, Lakatos, & Hewitt 1997. (**bv**) Borden 1997; Brattli, Anderson, & Linton 1998; Ducauze et al. 1986; Kolomiets & Bogdanova 1998; Lieutier, Vouland, & Pettinetti 1997; Loyning & Kirkendall 1996; Luterek 1996; Zahradnik, Knížek, & Vrkoc 1998. (**cn**) Bogdanova 1998; Borden 1997; Cech & Krehan 1997; Cech & Tomiczek 1996; Grodzki, Kolk, & Stocki 1997; Knížek &

Zahradník 1999; Kolk & Sierpiński 1998, 1999; Leontovyč, Turčani, & Zúbrik 1999; Luterek 1996; Mracek 1995a, 1995b; Simionescu 1995; Svestka 1996; Svestka & Wiesner 1997; Tabakovic & Minic 1998; Tomiczek & Krehan 1999; Tsankov, Mirchev, & Tomovsky 1999; Turčani 1998; Zahn 1999; Zahradník & Šrůtka 1999; Zahradník, Knížek, & Vrkoc 1998; Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník et al. 1995:6. (**ds**) Anonymous 1992a:634; Haack & Cavey 1997:5; Kido & Azuma 1995; Konca 1995; Krivolutskaya 1996a:355; Kulinich & Orlinskii 1998; Öymen 1992; Riba 1996; Simionescu 1995; Telnov et al. 1997:135; Voolma & Süda 1999:190; Voolma, Õunap, & Süda 1996:129, 1997a:21, 1997b:32, 2000:56; Yanovskii 1999:344. (**ec**) Bakke 1996; Bogdanova 1998; Chen et al. 1999; Dajoz 1998:445; Hedqvist 1998:79; Herard & Mercadier 1996; Kolomiets & Bogdanova 1998; Mokrzycki 1995a; Yang 1996. (**hb**) Chen et al. 1999; Dajoz 1998:445; Tsankov, Mirchev, & Tomovsky 1999. (**tx**) Anonymous 1992a:634; Krivolutskaya 1996a:355; Stauffer, Lakatos, & Hewitt 1997; Voolma, Õunap, & Süda 1997b:32; Yanovskii 1999:344.

Page 489 ***amitinus*** (Eichhoff). Add:

FIGURES: Smith & Roy 1996:41 (gallery pattern); Voolma, Õunap, & Süda 1997b:32 (antenna); Zahradník et al. 1995:7 (gallery pattern).

DISTRIBUTION: EUROPE: Estonia, Latvia.

REFERENCES: (**an**) Stauffer, Lakatos, & Hewitt 1997. (**bv**) Jakuš 1998a, 1998b, 1998c; Mihalciuc, Mircioiu, & Bujila 1998. (**cn**) Cech & Krehan 1997; EPPO/CABI 1997:306; Grodski 1998; Knížek, Zahradník, & Liška 1998; Kolk & Sierpiński 1998, 1999; Mandelshtam 1999; Mihalciuc 1997; Mihalache, Mihalciuc, & Ciornei 1997; Mihalciuc, Mircioiu, & Bujila 1998; Simionescu 1995; Smith & Roy 1996:41; Šrůtka, Liška, & Kapitola 1998; Turčani 1998; Turčani & Novatný 1998; Wermlinger et al. 1999; Zahn 1999; Zahradník & Šrůtka 1999; Zahradník et al. 1995:4; Zúbrik et al. 1999. (**ds**) EPPO/CABI 1997:306; Gutowski & Kubisz 1995; Holzschuh & Perny 1996:5; Kulinich & Orlinskii 1998; Lindelöw 1998b; Lundberg & Peterson 1997; Mandelshtam 1999; Öymen 1992; Peltonen et al. 1998; Telnov et al. 1997:135; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:32, 2000:58. (**ec**) Coelin, Niu, & Führer 1996; Haidler, Wegensteiner, & Weiser 1998; Jakuš 1995a, 1998a, 1998b, 1998c; Khaustov 1999; Kirisits, Wingfield, & Führer 1998; Kula & Ząbecki 1997a, 1997b, 1999a, 1999b; Martikainen et al. 1999; Õunap 1999; Peltonen et al. 1998; Simionescu 1995; Wermlinger & v. Hirschheydt 1996; Wermlinger et al. 1999. (**hb**) EPPO/CABI 1997:306; Gutowski & Kubisz 1995; Klimetzek & Schlenstedt 1991; Wermlinger & v. Hirschheydt 1996. (**tx**) EPPO/CABI 1997: 306; Stauffer, Lakatos, & Hewitt 1997; Voolma, Õunap, & Süda 1997b:32.

Page 491 *amitinus montanus* Fuchs (synonym of ***amitinus*** (Eichhoff)). Add:

REFERENCES: (**an**) Stauffer & Zuber 1998. (**bv**) Stauffer & Zuber 1998.

Page 491 ***avulsus*** (Eichoff). Add:

DISTRIBUTION: NORTH AMERICA: United States (Oklahoma).

REFERENCES: (**an**) Seybold et al. 1995a. (**bv**) Nation, Holtz, & Phillips 1996; Skillen et al. 1997:56. (**ds**) Arnold & Jiracek 1982; Peck & Thomas 1998:159. (**tx**) Seybold et al. 1995.

Page 492 ***bonanseai*** (Hopkins). Add:
FIGURES: Cibrián et al. 1995:305 (adult, damage, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Chihuahua, Morelos, Nuevo León, Oaxaca, Tamaulipas, Tlaxcala, Zacatecas).
HOSTS: *Pinus arizonica, P. ayachuite, P. cembroides, P. chihuahua, P. durangensis, P. engelmannii, P. flexilis, P. hartwegii, P. leiophylla, P. oocarpa, P. patula, P. rudis.*
REFERENCES: (**an**) Seybold et al. 1995a. (**cn**) Cibrián et al. 1995:304; Tkacz et al. 1998:18,36. (**ds**) Cibrián et al. 1995:304; Tkacz et al. 1998: 18,36. (**hb**) Cibrián et al. 1995:304; Tkacz et al. 1998:18,36. (**tx**) Seybold et al. 1995.

Page 493 ***borealis borealis*** Swaine. Add:
REFERENCES: (**ds**) Rykken & Hanson 1999:29. (**hb**) Rykken & Hanson 1999:29. (**tx**) Rykken & Hanson 1999:29.

Page 494 ***calligraphus*** (Germar). Add:
FIGURES: Cibrián et al. 1995:317 (adult, damage, gallery pattern).
DISTRIBUTION: NORTH AMERICA: United States (Oklahoma).
HOSTS: *Pinus caribaea, P. maximinoi, P. michoacana, P. montezumae, P. oocarpa, P. pseudostrobus.*
REFERENCES: (**an**) Cane, Cox, & Moar 1995. (**bv**) Borden 1997; Flechtmann, Dalusky, & Berisford 1999; Nation, Holtz, & Phillips 1996; Skillen et al. 1997:59. (**cn**) Borden 1997; Cane, Cox, & Moar 1995; Cibrián et al. 1995:316; EPPO/CABI 1992:275, 1997:309; Haack 1998b; Haack & Paiz-Schwartz 1997:72. (**ds**) Arnold & Jiracek 1982; Cibrián et al. 1995:316; EPPO/CABI 1992:275, 1997:309; Peck & Thomas 1998: 159; Rykken & Hanson 1999:27. (**ec**) EPPO/CABI 1992:275. (**hb**) Cibrián et al. 1995:316; Dunn 1996:194; EPPO/CABI 1992:275, 1997: 309; Haack & Paiz-Schwartz 1997:72; Rykken & Hanson 1999:27. (**tx**) EPPO/CABI 1997:309; Dunn 1996:194; Rykken & Hanson 1999:27.

Page 497 ***cembrae*** (Heer). Add:
FIGURES: Nierhaus-Wunderwald 1995a, 1995b (adult).
DISTRIBUTION: ASIA: China (Heilongjiang).
HOSTS: *Larix gmelinii.*
REFERENCES: (**an**) Stauffer, Lakatos, & Hewitt 1997; Stauffer et al. 2001. (**bv**) Schmidt, Schmidt, & Fisher 1997. (**cn**) EPPO/CABI 1992:177, 1997:315; Lunderstaedt 1999; Nierhaus-Wunderwald 1995a, 1995b; Rohde, Waldmann, & Lunderstadt 1996; Soma et al. 1997, 1998; Watzek & Niemeyer 1996; Wermlinger et al. 1999; Zahn 1999; Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník et al. 1995:7. (**ds**) EPPO/CABI 1992:177, 1997: 318, 1996:211; Hansen, M. et al. 1996:270; Kido & Azuma 1995; Lundberg & Peterson 1997; Pavlin 1997; Yanovskii 1999:344. (**ec**) EPPO/ CABI 1992:177; Kirisits, Wingfield, & Führer

1998; Nierhaus-Wunderwald 1995a, 1995b; Pashenova et al. 1995; Wermlinger et al. 1999; Yamoka et al. 1998. **(hb)** Elsner 1997; EPPO/CABI 1992:177, 1997:315; Nierhaus-Wunderwald 1995a, 1995b; Schlyter & Zhang 1996. **(ms)** Soma et al. 1996. **(tx)** EPPO/CABI 1992:177, 1997:315; Stauffer, Lakatos, & Hewitt 1997; Stauffer et al. 2001; Yanovskii 1999:344.

Page 499 ***subelongatus*** Motschulsky (listed as a synonym of **cembrae** (Heer), remove from synonymy). Add:

NOTES: Listed as a synonym in 1992 catalog, removed from synonymy in Stauffer et al. 2001.

REFERENCES: **(an)** Stauffer et al. 2001. **(bv)** Kolomiets & Bogdanova 1998. **(cn)** Gao Changi et al. 1998. **(ds)** Krivolutskaya 1996a:356; Kulinich & Orlinskii 1998. **(ec)** Gao Chanqi et al. 1998; Kolomiets & Bogdanova 1998; Yang 1996. **(tx)** Krivolutskaya 1996a:356; Stauffer et al. 2001.

Page 500 ***concinnus*** (Mannerheim). Move to **Pseudips**.

Page 500 ***confusus*** (LeConte). Add:

FIGURES: Cibrián et al. 1995:313 (adult, damage, gallery pattern).

REFERENCES: **(an)** Cognato, Rogers, & Teale 1995; Page et al. 1997. **(cn)** Angwin & Eager 1998; Cibrián et al. 1995:312; EPPO/CABI 1992:275, 1997:318. **(ds)** Cibrián et al. 1995:312; EPPO/CABI 1992:275, 1997:318; Safranyik 1995. **(ec)** Angwin & Eager 1998; EPPO/CABI 1992:275. **(hb)** Cibrián et al. 1995:312; EPPO/CABI 1992:275, 1997:318. **(tx)** Cognato et al. 1997; EPPO/CABI 1997:318; Page et al. 1997.

Page 502 ***duplicatus*** (Sahlberg). Add:

FIGURES: Holzschuh 1990a (habitus); Krivolutskaya 1996a:323 (declivity); Voolma, Õunap, & Süda 1997b:32 (declivity); Zahradník et al. 1995:5 (gallery pattern).

DISTRIBUTION: ASIA: China (Heilongjiang). EUROPE: Estonia, Latvia.

HOSTS: *Pinus koraiensis*.

REFERENCES: **(an)** Riegler, Stauffer, & van Meer 1998; Stauffer, Lakatos, & Hewitt 1997. **(bv)** Borden 1997; Grodzki 1998b; Holzschuh 1990a; Ivarsson 1995; Ivarsson & Birgersson 1995; Valkama, Räty, & Niemelä 1997. **(cn)** Borden 1997; Cech & Krehan 1997; EPPO/CABI 1992:177, 1997:323; Federov et al. 1998; Grodzki 1997b, 1997e, 1998b; Grodzki, Kolk, & Stocki 1997; Knížek, Zahradník, & Liška 1998; Kolk & Sierpiński 1998, 1999; Krehan 1996; Pfeffer & Knížek 1995; Šrůtka, Liška, & Kapitola 1998; Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník & Šrůtka 1999; Zahradník et al. 1995:4. **(ds)** EPPO/CABI 1992:177, 1997:323; Grodzki 1997b; Gutowski & Kubisz 1995; Holzschuh 1995:137; Kido & Azuma 1995; Knížek & Zahradník 1998; Krivolutskaya 1996a:356; Kulinich & Orlinskii 1998; Lindelöw 1998b; Telnov et al. 1997:135; Turčani & Zúbrik 1999; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:32, 2000:57; Yanovskii 1999:344. **(ec)** Bakke

1996; EPPO/CABI 1992:177; Federov et al. 1998; Hedqvist 1998:79; Kirisits, Wingfield, & Führer 1998; Krokene & Solheim 1996; Õunap 1999; Riegler, Stauffer, & van Meer 1998; Yang 1996. **(hb)** EPPO/CABI 1992:177, 1997:323; Grodzki 1997b; Gutowski & Kubisz 1995; Holzschuh 1989; Pfeffer & Knížek 1995; Schlyter & Zhang 1996. **(ms)** Holzschuh 1989. **(tx)** EPPO/CABI 1997:323; Krivolutskaya 1996a:356; Stauffer, Lakatos, & Hewitt 1997; Voolma, Õunap, & Süda 1997b:32; Yanovskii 1999:344.

Page 503 ***emarginatus*** (LeConte). Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 504 ***erosus*** (Wollaston). Moved to **Orthotomicus**.

Page 506 ***grandicollis*** (Eichhoff). Add:
FIGURES: Cibrián et al. 1995:315 (adult, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Colima, Guerrero, Veracruz), United States (Oklahoma).
HOSTS: *Pinus arizonica, P. durangensis, P. leiophylla, P. montezumae, P. oocarpa, P. patula, P. pseudostrobus, P. teocote.*
REFERENCES: **(an)** Cognato, Rogers, & Teale 1995; Page et al. 1997. **(bv)** Flechtmann, Dalusky, & Berisford 1999; Hood & Ramsden 1997; Nation, Holtz, & Phillips 1996; Skillen et al. 1997:61; Wallin & Raffa 1999b. **(cn)** Arnold & Jiracek 1982; Cibrián et al. 1995:314; EPPO/CABI 1992:275; Haack & Paiz-Schwartz 1997:72. **(ds)** Cibrián et al. 1995:314; EPPO/CABI 1992:275, 1997:326; Peck & Thomas 1998:159. **(ec)** EPPO/CABI 1992:275, 1997:326. **(hb)** Cibrián et al. 1995:314; Dunn 1996:194; EPPO/CABI 1992:275, 1997:326; Haack & Paiz-Schwartz 1997:72. **(tx)** Cognato et al. 1997; Dunn 1996:194; EPPO/CABI 1997:326; Page et al. 1997.

Page 508 *cribricollis* Eichhoff (synonym of ***grandicollis*** (Eichhoff)). Add:
REFERENCES: **(an)** Cognato, Rogers, & Teale 1995; Page et al. 1997. **(cn)** Cibrián et al. 1995:314. **(ds)** Cibrián et al. 1995:314. **(hb)** Cibrián et al. 1995:314. **(tx)** Cognato et al. 1997; Page et al. 1997.

Page 509 ***hauseri*** Reitter. Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998; Yanovskii 1999:344. **(tx)** Yanovskii 1999:344.

Page 509 ***hoppingi*** Lanier. Add:
REFERENCES: **(an)** Cognato, Rogers, & Teale 1995; Page et al. 1997. **(bv)** Skillen et al. 1997:64. **(cn)** Cibrián et al. 1995:312. **(ds)** Cibrián et al. 1995:312. **(hb)** Cibrián et al. 1995:312. **(tx)** Cognato et al. 1997; Page et al. 1997.

Page 509 ***integer*** (Eichhoff). Add:
FIGURES: Cibrián et al. 1995:309 (adult, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Chiapas, Colima, Distrito Federal, Guerrero, Morelos, Querétaro, Tamaulipas).

HOSTS: *Pinus arizonica, P. chihuahua, P. cooperi, P. durangensis, P. engelmanni, P. hartwegii, P. leiophylla, P. maximinoi, P. montezumae, P. patula, P. pseudostrobus, P. radiata, P. rudis, P. teocote.*
REFERENCES: **(bv)** Miller, D. et al. 1997. **(cn)** Cibrián et al. 1995:308. **(ds)** Cibrián et al. 1995:308. **(hb)** Cibrián et al. 1995:308.

Page 510 ***latidens*** (LeConte). Add:
REFERENCES: **(an)** Page et al. 1997. **(bv)** Borden 1995c, 1997; Miller, Borden, & Lindgren 1995; Savoie et al. 1998; Skillen et al. 1997:65. **(cn)** Borden 1995c, 1997. **(ec)** Reid 1999. **(hb)** Peck, Equihua-Martinez, & Ross 1997:207; Reid 1999. **(tx)** Cognato et al. 1997; Page et al. 1997.

Page 511 ***lecontei*** Swaine. Add:
FIGURES: Cibrián et al. 1995:311 (adult, damage, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Chiapas, Oaxaca, Sonora).
HOSTS: *Pinus arizonica, P. ayacahuite, P. cooperi, P. engelmannii, P. leiophylla.*
REFERENCES: **(an)** Cognato, Rogers, & Teale 1995; Page et al. 1997. **(bv)** Skillen et al. 1997:67. **(cn)** Cibrián et al. 1995:310; EPPO/CABI 1992:275, 1997:331. **(ds)** Cibrián et al. 1995:310; EPPO/CABI 1992:275, 1997:331. **(ec)** EPPO/CABI 1992:275. **(hb)** Cibrián et al. 1995:310; EPPO/CABI 1992:275, 1997:331. **(tx)** Cognato et al. 1997; EPPO/CABI 1997:331; Page et al. 1997.

Page 512 ***mannsfeldi*** (Wachtl). Add:
DISTRIBUTION: ASIA: China (Guizhou). EUROPE: Spain.
HOSTS: *Picea* sp.
REFERENCES: **(an)** Stauffer, Lakatos, & Hewitt 1997. **(ds)** Öymen 1992; Riba 1996. **(ec)** Yang 1996. **(tx)** Stauffer, Lakatos, & Hewitt 1997.

Page 512 ***mexicanus*** (Hopkins). Move to **Pseudips**.

Page 513 ***montanus*** (Eichhoff). Add:
REFERENCES: **(an)** Cognato, Rogers, & Teale 1995; Page et al. 1997. **(tx)** Cognato et al. 1997; Page et al. 1997.

Page 514 ***nitidus*** Eggers. Add:
DISTRIBUTION: ASIA: China (Gansu).
HOSTS: *Picea crassifolia.*
REFERENCES: **(ds)** Yang 1996. **(ec)** Yang 1996. **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

Page 514 ***orientalis*** Wood & Yin. Move to **Pseudips**.

Page 514 ***paraconfusus*** Lanier. Add:
REFERENCES: **(an)** Cognato, Rogers, & Teale 1995; Ivarsson et al. 1998; Page et al. 1997; Seybold, Cognato, & Page 1998; Tittiger et al. 1998. **(bv)** Borden 1997; Ivarsson, Blomquist, & Seybold 1997; Ivarsson et al. 1998; McPheron et al. 1997; Seybold et al. 1995b; Skillen et al.

1997:70; Tillman et al. 1998b, 1999; Tittiger et al. 1999. **(cn)** Borden 1997; EPPO/CABI 1997:318; Shea & Neustein 1995. **(ds)** EPPO/CABI 1997:318. **(ec)** Storer et al. 1999. **(hb)** Byers 1999; EPPO/CABI 1997: 318. **(tx)** Cognato et al. 1997; EPPO/CABI 1997:318; Page et al. 1997; Seybold, Cognato, & Page 1998.

Page 515 ***perturbatus*** (Eichhoff). Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: **(bv)** Skillen et al. 1997:73. **(ds)** Furniss & Johnson 1995:338. **(hb)** Furniss & Johnson 1995:338; Werner & Holsten 1997.

Page 517 ***pini*** (Say). Add:
FIGURES: Cibrián et al. 1995:307 (adult, gallery pattern, life history); Hiratsuka, Langor, & Crane 1995:60 (habitus, gallery pattern, damage).
DISTRIBUTION: NORTH AMERICA: Mexico (Baja California Norte, Durango, Sonora).
HOSTS: *Pinus arizonica, P. cooperi, P. durangensis, P. engelmannii, P. quadrifolia.*
REFERENCES: **(an)** Cognato, Seybold, & Sperling 1999a, 1999b; Hager & Teale 1996; Page et al. 1997; Robertson 1998b; Seybold et al. 1995; Teale 1999; Tillman et al. 1998a, 1998b; Wallin & Raffa 1999a. **(bv)** Borden 1995c, 1997; Cognato, Seybold, & Sperling 1999b; Dahlsten et al. 1999; Hager & Teale 1996; Huber et al. 1999; Ivarsson, Blomquist, & Seybold 1997; Lissemore 1997; Miller, Borden, & Lindgren 1995; Miller, Borden, & Slessor 1996; Miller et al. 1997; Raffa & Hobson 1999; Reid 1997; Reid & Robb 1999; Reid & Roitberg 1995; Reid & Stamps 1997; Robertson 1998a; Robertson & Roitberg 1998; Robins & Reid 1997; Safranyik, Linton, & Shore 1999; Safranyik, Shore, & Linton 1996; Savoie et al. 1998; Seybold et al. 1995a, 1995b; Shumate & Ayres 1999; Teale 1999; Tillman et al. 1998a, 1998b; Villa C. & Wagner 1996a, 1996b; Wallin & Raffa 1999. **(cn)** Borden 1995c, 1997; Cibrián et al. 1995:306; Duthie-Holt, Borden, & Rankin 1999; EPPO/CABI 1992:275, 1997:335; Gara, Millegan, & Gibson 1999; Kegley 1998; Klepzig, Smalley, & Raffa 1996; Ryan & Amman 1996. **(ds)** Cibrián et al. 1995: 306; EPPO/CABI 1992:275, 1997:335; Hiratsuka, Langor, & Crane 1995:61; Rykken & Hanson 1999:28; Safranyik 1995. **(ec)** EPPO/CABI 1992:275; Dahlsten et al. 1999; Furniss, Harvey, & Solheim 1995; Klepzig, Smalley, & Raffa 1996; Nevill & Safranyik 1996a; Raffa & Dahlsten 1995; Raffa, Krause, & Reich 1998; Reid & Robb 1999; Robins & Reid 1997; Villa C. & Wagner 1996a, 1996b; Wallin & Raffa 1999a. **(hb)** Cibrián et al. 1995:306; EPPO/CABI 1992:275, 1997:335; Haack & Lawrence 1995a, 1995b; Hiratsuka, Langor, & Crane 1995:61; Peck, Equihua-Martinez, & Robertson 1998; Reid 1997; Reid & Robb 1999; Robertson 1998b; Robertson & Roitberg 1998; Rykken & Hanson 1999:28; Safranyik, Linton, & Shore 1999; Sargent-Risa & Reid 1999; Villa C. & Wagner 1996a, 1996b. **(tx)** Cognato et al. 1997; EPPO/CABI 1997:335; Page et al. 1997; Rykken & Hanson 1999:28; Seybold et al. 1995.

Page 521 ***plastographus*** (LeConte). Add:

REFERENCES: **(cn)** EPPO/CABI 1997:340. **(ds)** EPPO/CABI 1997: 340. **(hb)** EPPO/CABI 1997:340. **(tx)** EPPO/CABI 1997:340.

Page 521 ***plastographus maritimus*** Lanier. Add:

REFERENCES: **(bv)** Warren et al. 1996.

Page 521 ***plastographus plastographus***: Add:

DISTRIBUTION: NORTH AMERICA: United States (Washington).

REFERENCES: **(cn)** EPPO/CABI 1992:275. **(ds)** EPPO/CABI 1992: 275; Furniss & Johnson 1995:338. **(ec)** EPPO/CABI 1992:275. **(hb)** EPPO/CABI 1992:275; Furniss & Johnson 1995:338.

Page 522 ***sexdentatus*** (Boerner). Add:

FIGURES: Dajoz 1998:444 (gallery pattern); Krivolutskaya 1996a:323 (declivity); Smith & Roy 1996:42 (adult); Voolma, Õunap, & Süda 1997b:32 (declivity).

DISTRIBUTION: ASIA: China (Gansu, Henan, Shaanxi, Yunnan). EUROPE: Estonia, Latvia.

HOSTS: *Pinus armandi, P. tabulaeformis, Pseudotsuga menziesii.*

REFERENCES: **(an)** Riegler, Stauffer, & van Meer 1998; Stauffer, Lakatos, & Hewitt 1997. **(bv)** Borden 1997; Ducauze et al. 1986; Fernández & Salgado 1999; Jactel 1996; Kolomiets & Bogdanova 1998; Lieutier, Vouland, & Pettinetti 1997; Borden 1997; Cech & Krehan 1997; Croise, Dreyer, & Lieutier 1998; EPPO/CABI 1992:177, 1997:344; Knížek & Zahradník 1999; Leontovy , Turčani, & Zúbrik 1999; Luterek 1996; Mihalache, Mihalciuc, & Ciornei 1997; Öymen 1992; Simionescu 1995; Smith & Roy 1996:42; Tsankov, Mirchev, & Tomovsky 1999; Turčani 1998; Zahn 1999; Zahradník & Šrůtka 1999. **(cn)** Dajoz 1998: 444; Koltay 1998; Šrůtka, Liška, & Kapitola 1998; Tomiczek & Krehan 1999; Zahradník 1997, 1998a; Zahradník & Knížek 1999. **(ds)** EPPO/ CABI 1992:177, 1997:344; Gutowski & Kubisz 1995; Haack & Cavey 1997:5; Haack et al. 1997; Hastings 1998; Kido & Azuma 1995; Konca 1995; Krivolutskaya 1996a:355; Kulinich & Orlinskii 1998; Lakatos 1999c; Lindelöw 1998b; Lombardero 1995:358–361; Markalas 1997:59; Öymen 1992; Podlussány 1998:304; Ponel 1995; Riba 1996; Simionescu 1995; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:32, 2000:57; Yanovskii 1999:345. **(ec)** Amezaga & Rodriguez 1998; Chen et al. 1999; Kolomiets & Bogdanova 1998; EPPO/CABI 1992:177; Hedqvist 1998:79; Lieutier et al. 1995; Mokrzycki 1995a; Õunap 1999; Riegler, Stauffer, & van Meer 1998; Yang 1996. **(hb)** Amezaga & Rodriguez 1998; Chen et al. 1999; Dajoz 1998:444; EPPO/CABI 1992:177, 1997:344; Gutowski & Kubisz 1995; Lieutier et al. 1995; Markalas & Kalapanida 1997; Tsankov, Mirchev, & Tomovsky 1999. **(tx)** EPPO/CABI 1997:344; Krivolutskaya 1996a:355; Stauffer, Lakatos, & Hewitt 1997; Voolma, Õunap, & Süda 1997b:32; Yanovskii 1999:345.

Page 527 *schmutzenhoferi* Holzschuh (synonym of ***stebbingi*** Strohmeyer). Add:

REFERENCES: **(bv)** Borden 1997. **(cn)** Borden 1997.

Page 527 ***tridens*** (Mannerheim). Add:

REFERENCES: (**bv**) Poland 1997; Poland & Borden 1998b, 1998c. (**ec**) Poland 1997; Poland & Borden 1997.

Page 527 *interruptus* Mannerheim (synonym of ***tridens tridens*** (Mannerheim)). Add:

REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Page 528 ***typographus*** (Linnaeus). Add:

FIGURES: Dajoz 1998:414 (proventriculus, digestive tube), 417 (gallery pattern); Krivolutskaya 1996a:323 (declivity); Smith & Roy 1996:42 (gallery pattern); Voolma, Õunap, & Süda 1997b:32 (declivity, antenna); Zahradník et al. 1995:5.

DISTRIBUTION: ASIA: China (Heilongjiang, Sechuan). EUROPE: Estonia, Latvia, Spain, United Kingdom (North Wales, introduction).

HOSTS: *Picea* sp., *Pinus koraiensis*.

REFERENCES: (**an**) Bohlander 1995, 1998a; Gruppe 1997; Hösle & Stauffer 1998; Krausse-Opatz, Koehler, & Schopf 1995; Lakatos 1999a; Mattanovich et al. 1999; Pavlíček, Żurovcová, & Starý 1997; Riegler, Stauffer, & van Meer 1998; Sahara, Marec, & Traut 1999; Schopf, Krausse, & Kohler 1995; Schutz et al. 1999; Simsek 1995; Stauffer 1997b, 1999; Stauffer & Hammock 1996; Stauffer, Lakatos, & Blecha 1996; Stauffer, Lakatos, & Hewitt 1997, 1999; Stauffer, van Meer, & Riegler 1997; Stauffer et al. 1997. (**bv**) Bockhorst 1997; Bohlander 1998b; Borden 1997; Brutovsky 1996; Byers 1996b; Dajoz 1998:443; Diminic et al. 1996; Franklin & Grégoire 1999; Hösle & Stauffer 1998; Ivarsson 1995; Jakuš 1998a, 1998b, 1998c; Jakuš & Dudova 1999; Kolomiets & Bogdanova 1998; Lakatos 199b; Lobinger & Skatulla 1996; Malphettes & Saintonge 1995; Mihalciuc, Mircioiu, & Bujila 1998; Nicolai 1997; Niemeyer & Watzek 1996; Niemeyer, Lenarduzzi, & Watzek 1995; Pfister 1997, 1998, 1999b; Reddemann & Schopf 1996; Schmidt, Schmidt, & Fisher 1997; Schmidt, Schmidt, & Mucha 1999; Slobodyan 1998; Starzyk 1996; Valkama, Räty, & Niemelä 1997; Weslien & Schroeder 1996; Zhang Qinge, Schlyter, & Anderson 1999; Zhang et al. 1999; Zumr & Šebek 1997. (**cn**) Anonymous 1996a:36, 1997b; Babuder & Pohleven 1995c; Babuder, Pohleven, & Brelih 1996; Baier 1995, 1996b; Baier, Bader, & Rosner 1999; Bakke, Strand, & Tveite 1995; Borden 1997; Brutovsky 1996; Cech 1998; Cech & Krehan 1997; Christiansen & Bakke 1997; Christiansen & Krokene 1999; Christiansen & Kucera 1999; Christiansen et al. 1999; Dajoz 1998:443; Diminic et al. 1996; Dubbel 1993; Dubbel & Vaupel 1996; Dubbel et al. 1995; Duelli et al. 1997; EPPO/CABI 1992:177, 1997:347; Faccoli & Stergule 1999; Federov et al. 1998; Feiger, Forster, & Hoffmann 1996; Forster 1997, 1998; Franklin et al. 1999; Frey et al. 1995; Gavrilovic & Korpic 1992; González 1996; González et al. 1996; Grégoire & De Proft 1996; Grégoire et al. 1997; Grodzki 1995a, 1995b, 1998a, 1999a; Grodzki, Kolk, & Stocki 1997; Habermann & Hartmann 1997; Hallet, Grégoire, & Coremans-Pelseneer 1994; Heidger 1995; Hrašovec 1995; Hrašovec & Harapin 1999; Humphreys & Allen 1999b; Igachi, Yamamoto, & Furuto

1999; Jakuš 1998e, 1998f; Jakuš & Dudova 1999; Kenis 1998; Keskinalemdar 1995; Klimatzek & Yue 1997; Knížek, Zahradník, & Liška 1998; Kolk & Sierpiński 1998, 1999; Koltay 1998; Kreutz et al. 1998; Lakatos 1997; Lieutier et al. 1997; Lindelöw 1998b; Lindelöw & Schroeder 1998, 1999; Lozzia 1995; Lunderstaedt 1999; Malphettes & Saintonge 1995; Marchetti, Salvadori, & Ambrosi 1999; Metzger 1998; Mihalciuc 1997; Mihalache, Mihalciuc, & Ciornei 1997; Mihalciuc, Mircioiu, & Bujila 1998; Niemeyer 1996, 1997; Niemeyer & Watzek 1996; Niemeyer, Ackermann, & Watzek 1995; Niemeyer, Lenarduzzi, & Watzek 1995; Otto 1999; Öymen 1992; Pavlin 1992; Peltonen 1999; Pfeffer & Skuhravy 1995a, 1995b; Pfister 1997, 1998, 1999b; Prien et al. 1996; Raty, Ciornei, & Mihalciuc 1997; Raty et al. 1995; Rohde, Waldmann, & Lunderstadt 1996; Schmidt, O. 1997; Schwenke 1996; Simionescu 1995; Simionescu, Negura, & Cucos 1999; Slobodyan 1998, 1999; Smith & Roy 1996:42; Soltes 1996; Spaeth, Haselbarth, & Balder; Šrůtka, Liška, & Kapitola 1998; Starzyk 1996:28; Svestka 1995; Tiberi 1997; Turčani 1998; Turčani & Novatný 1998; Vaupel & Zimmermann 1996; Watzek & Niemeyer 1996; Wegensteiner 1996; Wermlinger et al. 1999; Zahn 1999; Zahradník 1996, 1997, 1998a; Zahradník & Knížek 1999; Zahradník & Šrütka 1999; Zahradník, Knížek, & Kapitola 1993, 1994; Zahradník et al. 1995:4; Zolubas & Žiogas 1998; Zúbrik et al. 1999; Zumr & Šebek 1997. (**ds**) Anonymous 1996:36, 1997a; Christiansen & Krokene 1999; EPPO/CABI 1992:177, 1997:347; Gutowski & Kubisz 1995; Haack & Cavey 1997:5; Haack et al. 1997; Haidler, Wegensteiner, & Weiser 1998; Hansen, M. et al. 1996:270; Hastings 1998; Holzschuh & Perny 1996:5; Humphreys & Allen 1999b; Kenis 1998; Kido & Azuma 1995; Krivolutskaya 1996a:356; Kulinich & Orlinskii 1998; LaGasa, Furniss, & Kamping 1997; Öymen 1992; Peltonen et al. 1998; Riba 1996; Riegler, Stauffer, & van Meer 1998; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:32, 2000:58; Waltz 1996; Yanovskii 1999:345. (**ec**) Abgrall & Juvy 1994; Baier 1996a; Bakke 1996; Bakke, Strand, & Tveite 1995; Brignolas et al. 1998; Christiansen & Bakke 1997; Coelin, Niu, & Führer 1996; Dajoz 1998:443; Dippel et al. 1997; EPPO/CABI 1992:177; Federov et al. 1998; Frey et al. 1995; Grodzki 1998a; Haidler, Wegensteiner, & Weiser 1998; Haidler et al. 1998; Hedqvist 1998:79; Heidger 1995; Jakuš 1995a, 1998a, 1998b, 1998c, 1998d; Khaustov 1999; Kirisitis 1998; Kirisitis & Anglberger 1999; Kirisitis, Wingfield, & Führer 1998; Kirschner & Oberwinkler 1999b; Klimetzek & Yue 1997; Kolomiets & Bogdanova 1998; Krokene & Solheim 1996, 1998a; Kula & Ząbecki 1997a, 1997b, 1998, 1999a, 1999b; Laucius & Zolubas 1998; Lobinger & Skatulla 1996; Martikainen et al. 1999; Moser, Perry, & Furuta 1997a, 1997b; Nicolai 1996; Otto 1999; Õunap 1999; Pavlin 1991; Peltonen et al. 1998; Schroeder 1999b; Schwenke 1996; Thiel 1999; Visser et al. 1995; Wegensteiner 1996; Wegensteiner & Weiser 1995, 1996a, 1996b, 1998a, 1998b, 1998c; Wegensteiner, Weiser, & Führer 1996; Weiser, Wegensteiner, & Žižka 1997, 1998; Wermelinger & Seifert 1998, 1999; Wermlinger & v. Hirschheydt 1996; Wermelinger, Fecker, & Schneider-

Mathis 1998; Wermelinger, Forster, & Duelli 1998; Wermelinger et al. 1995, 1999; Weslien & Schroeder 1999; Yang 1996. (**hb**) Anonymous 1997b; Baier 1996a; Bakke, Strand, & Tveite 1995; Byers 1996b, 1999; Dajoz 1998:443; Duelli et al. 1997; EPPO/CABI 1992:177, 1997:347; Gutowski & Kubisz 1995; Humphreys & Allen 1999b; Klimetzek & Schlenstedt 1991; Laucius & Zolubas 1998; Lobinger 1996; Lobinger & Skatulla 1996; Malphettes & Saintonge 1995; Mattanovich et al. 1999; Nicolai 1995b, 1996, 1997; Prien et al. 1996; Schlyter & Zhang 1996; Schroeder et al. 1999; Schwenke 1996; Stauffer, Lakatos, & Hewitt 1999; Thiel 1999; Wermlinger & v. Hirschheydt 1996; Wermelinger & Seifert 1999; Wermelinger et al. 1995; Weslien & Schroeder 1996, 1999; Zahradník, Knížek, & Kapitola 1993, 1994; Zolubas & Byers 1995. (**ms**) Larsson 1999; Schroeder & Lindelöw 1999. (**tx**) EPPO/CABI 1997:347; Krivolutskaya 1996a:356; Stauffer, Lakatos, & Hewitt 1997; Voolma, Õunap, & Süda 1997b:32; Yanovskii 1999:345.

Page 538 *typographus japonicus* Niisima (synonym of ***typographus*** (Linnaeus)). Add:
REFERENCES: (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a:356. (**ec**) Lawson, Furuta, & Katagiri 1995, 1996, 1997; Moser, Perry, & Furuta 1997; Yamaoka et al. 1997. (**hb**) Furuta, Iguchi, & Lawson 1996; Lawson, Furuta, & Katagiri 1995. (**tx**) Krivolutskaya 1996a:356.

Page 538 **ussuriensis** Reitter. Add:
REFERENCES: (**ds**) Kulinich & Orlinskii 1998; Yanovskii 1999:345. (**tx**) Yanovskii 1999:345.

Page 538 ***woodi*** Thatcher. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: (**ds**) Furniss & Johnson 1995:338. (**hb**) Furniss & Johnson 1995:338.

Add genus: ***Pseudips*** Cognato 2000:365. Type species: ***Bostrichus concinnus*** Mannerheim, 1852, original designation.
REFERENCES: (**tx**) Cognato 2000:365.

concinnus (Mannerheim). From **Ips**. Add:
REFERENCES: (**tx**) Cognato 2000:365.

mexicanus (Hopkins). From **Ips**. Add:
FIGURES: Cibrián et al. 1995:303 (adult, damage, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Chihuahua, Coahuila, Morelos, Nuevo León, San Luis Potosí, Tlaxcala), United States (Washington).
HOSTS: *Pinus michoacana*, *P. rudis*.
REFERENCES: (**bv**) Savoie et al. 1998. (**cn**) Cibrián et al. 1995:302. (**ds**) Cibrián et al. 1995:302; Furniss & Johnson 1995:338; Riba 1996. (**hb**) Cibrián et al. 1995:302; Furniss & Johnson 1995:338. (**tx**) Cognato 2000:36; Cognato et al. 1997.

orientalis (Wood & Yin). From **Ips**.
REFERENCES: (**tx**) Cognato 2000:365.

TRIBE DRYOCOETINI

Page 539 **Dryocoetini**. Add:
REFERENCES: (**an**) Normark, Jordal, & Farrell 1999.

Genus **Thamnurgus** Eichhoff

Page 542 ***characiae*** Rosenhauer. Add:
REFERENCES: (**ds**) Hastings 1998.

Page 544 ***joliveti*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:59.

Page 545 ***petzi*** Reitter. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:59.

Genus **Xylocleptes** Ferrari

Page 547 ***bispinus*** (Duftschmidt). Add:
REFERENCES: (**bv**) Borden 1997. (**cn**) Borden 1997. (**ds**) Dinnin 1997; Hastings 1998; Mihajlovic et al. 1998; Öymen 1992; Podlussány 1998: 304; Riba 1996; Whitehouse 1997b. (**ec**) Mihajlovic et al. 1998.

Page 549 ***brunneus*** (Nunberg). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Page 549 ***castaneus*** Browne. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:60.

Genus **Dendrocranulus** Schedl

Page 550 ***carbonarius*** (Ferrari). Add:
REFERENCES: (**ds**) Peck & Thomas 1998:159.

Page 551 ***declivis*** Schedl. Add:
HOSTS: *Luffga acutangula* (see Appendix).

Page 552 ***maurus*** (Blandford).
Delete "Mexico (Oaxaca)" from Distribution in 1997 supplement (page 120).

Page 553 ***sechii*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Page 554 ***vinealis*** Wood.
Delete "Mexico (Oaxaca)" from Distribution in 1997 supplement (page 121).

Genus **Dactylotrypes** Eggers

Page 554 ***longicollis*** (Wollaston). Add:
FIGURES: Lombardero 1995:368 (injury to seeds).
REFERENCES: (**ds**) Lombardero 1995:368; Riba 1996.

Genus **Lymantor** Lovendal

Page 554 **Lymantor** Lovendal. Add:
KEYS: Krivolutskaya 1996a:349 (to East Russian species); Voolma, Õunap, & Süda 1997b:33 (to Estonian species).
REFERENCES: (**tx**) Krivolutskaya 1996a:349; Voolma, Õunap, & Süda 1997b:33.

Page 554 ***aceris*** (Lindemann). Add:
FIGURES: Krivolutskaya 1996a:320 (apex of elytra).
REFERENCES: (**ds**) Bense & Schott 1998:326; Krivolutskaya 1996a: 350; Telnov et al. 1997:135; Yanovskii 1999:345. (**tx**) Krivolutskaya 1996a:350; Yanovskii 1999:345.

Page 555 ***coryli*** (Perris). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:33 (declivity).
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: (**ds**) Hansen, M. 1996:211; Hansen, M., Pedersen, & Pritzl 1999:100; Hansen, M. et al. 1997:147, 1998:92; Öymen 1992; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:33, 2000:59; Yanovskii 1999:345. (**ec**) Hedqvist 1998:78. (**tx**) Voolma, Õunap, & Süda 1997b:33; Yanovskii 1999:345.

Page 556 ***decipiens*** (LeConte).
Delete "Ohio" from Distribution in 1997 supplement (page 122).

Genus **Taphrorychus** Eichhoff

Page 557 ***alni*** Pfeffer. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:58.

Page 557 ***bicolor*** (Herbst). Add:
REFERENCES: (**bv**) Francke et al. 1996; Nicolai 1997. (**cn**) Hartmann & Blank 1998; Kleinevoss, Topp, & Bohac 1996. (**ds**) Dinnin 1997; Haack & Cavey 1997:5; Hansen, M. 1996:211; Hansen, M. et al. 1997:147, 1998:92; Lombardero 1995:362; Öymen 1992; Riba 1996; Roper 1996. (**ec**) Dippel et al. 1997; Haase, Topp, & Zach 1998; Harz & Topp 1999; Hedqvist 1998:78; Nicolai 1996. (**hb**) Haase, Topp, & Zach 1998; Nicolai 1995b, 1996, 1997; Simon 1996. (**ms**) Takikawa, Sano, & Mori 1997.

Page 559 ***hirtellus*** Eichhoff. Add:
REFERENCES: (**ds**) Öymen 1992.

Page 559 ***machnovskii*** (Sokanovski): Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:56.

Page 560 ***villifrons*** (Dufour). Add:
DISTRIBUTION: ASIA: Iran (Giln, Tehrn).
HOSTS: *Betula alba*, *Quercus petraea*, *Q. rober*, *Salix cinerea*.
REFERENCES: (**ds**) Borumand 1998:93; Coope 1998; Haack & Cavey 1997:5; Hastings 1998; Lombardero 1995:361–367; Öymen 1992; Riba 1996; Voolma & Mandelshtam 1998.

Genus **Peridryocoetes** Wood

Page 561 ***nitens*** (Schedl). Add:
REFERENCES: (**ds**) Bright 2000:53.

Genus **Cyrtogenius** Strohmeyer

Page 563 ***agathis*** (Browne). Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:39

Page 563 ***anisopterae*** (Browne). Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:40.

Page 563 ***brevior*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**ds**) Bright 2000:53.

Page 564 ***elongatissimus*** Wood. Add *longipennis* Browne as a synonym. Add:
REFERENCES (**tx**) Beaver 1998c:180.

Page 566 ***laevis*** (Browne). Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:40.

Page 566 *longipennis* Browne. Move to ***elongatissimus*** Wood as a synonym. Add:
SYNONYMY: Beaver 1998c:180.

Page 566 ***luteus*** (Blandford). Add:
FIGURES: Anonymous 1992a:635 (declivity, head).
DISTRIBUTION: ASIA: China (Hunan).
HOSTS: *Pinus armandi.*
REFERENCES: (**ds**) Anonymous 1992a:635. (**ec**) Chen et al. 1999. (**hb**) Chen et al. 1999. (**tx**) Anonymous 1992a:635.

Page 567 ***nitidus*** (Hagedorn). Add:
DISTRIBUTION: ASIA: Thailand (Trang).
REFERENCES: (**ds**) Beaver 1999d:179.

Page 567 ***parinarii*** (Browne). Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:41.

Page 567 ***parvus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:28.

Page 568 ***preparvus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:28.

Page 568 ***sarawakensis*** (Schedl). Add:
REFERENCES: **(ds)** Bright 2000:54.

Page 568 ***scabricollis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:29.

Page 568 ***subacuminatus*** (Schedl). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:54.

Page 569 ***vaticae*** (Nunberg). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:58.
Add species:

alternatus (Eggers). From **Coccotrypes**. Add:
REFERENCES: **(tx)** Beaver 1998c:182.

Genus **Dryocoetes** Eichhoff

Page 569 **Dryocoetes** Eichhoff. Add:
KEYS: Krivolutskaya 1996a:350 (to East Russian species).
FIGURES: Voolma, Õunap, & Süda 1997b:33 (to Estonian species).
REFERENCES: **(bv)** Jakuš 1998a, 1998b, 1998c; Peltonen, Heliövaara, & Väisänen 1997. **(cn)** Mihalciuc, Mircioiu, & Bujila 1998. **(ds)** Peltonen et al. 1998. **(ec)** Jakuš 1995a, 1998a, 1998b, 1998c; Peltonen et al. 1998. **(tx)** Krivolutskaya 1996a:350; Voolma, Õunap, & Süda 1997b:33.

Page 570 ***aceris*** Krivolutskaya. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:352; Yanovskii 1999:346. **(tx)** Krivolutskaya 1996a:352; Yanovskii 1999:346.

Page 570 ***affaber*** (Mannerheim). Add:
REFERENCES: **(bv)** Borden 1997; Poland 1997; Poland & Borden 1998b, 1998c; Skillen et al. 1997:47. **(cn)** Borden 1997. **(ds)** Bain 1999. **(ec)** Poland 1997; Poland & Borden 1997.

Page 571 ***alni*** (Georg). Add:
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: **(cn)** Wermlinger et al. 1999. **(ds)** Dinnin 1997; Hansen, M. 1996:211; Hansen, M., Pedersen, & Pritzl 1999:100; Hansen, M. et al. 1996:270; Krivolutskaya 1996a:351; Öymen 1992; Riba 1996; Telnov et

al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:33, 2000:59; Yanovskii 1999:346. **(ec)** Hedqvist 1998:77; Martikainen et al. 1999; Õunap 1999; Wermlinger et al. 1999. **(tx)** Krivolutskaya 1996a: 351; Voolma, Õunap, & Süda 1997b:33; Yanovskii 1999:346.

Page 572 ***autographus*** (Ratzeburg). Add:

FIGURES: Krivolutskaya 1996a:320 (apex of elytra); Voolma, Õunap, & Süda 1997b:33 (declivity).

DISTRIBUTION: EUROPE: Estonia, Latvia.

HOSTS: *Pinus armandi.*

REFERENCES: **(bv)** Skillen et al. 1997:49. **(cn)** Wermlinger et al. 1999. **(ds)** Bain 1999; Gutowski & Kubisz 1995; Hastings 1998; Holzschuh & Perny 1996:5; Kido & Azuma 1995; Krivolutskaya 1996a:351; Kulinich & Orlinskii 1998; Rykken & Hanson 1999:30; Sippola, Siitonen, & Kamping 1995; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996: 130, 1997a:21, 1997b:33, 2000:60; Yanovskii 1999:346. **(ec)** Bakke 1996; Braasch, Metge, & Burgermeister 1999; Chen et al. 1999; Haidler, Wegensteiner, & Weiser 1998; Haidler et al. 1998; Hedqvist 1998:77; Jakuš 1995a; Kirschner & Oberwinkler 1998; Kula & Zbecki 1999a, 1999b; Martikainen et al. 1999; Mokrzycki 1995a; Õunap 1999; Wermlinger & v. Hirschheydt 1996; Wermlinger et al. 1999; Weslien & Schroeder 1999. **(hb)** Chen et al. 1999; Gutowski & Kubisz 1995; Klimetzek & Schlenstedt 1991; Rykken & Hanson 1999:30; Wermlinger & v. Hirschheydt 1996. **(tx)** Krivolutskaya 1996a:351; Rykken & Hanson 1999:30; Voolma, Õunap, & Süda 1997b:33; Yanovskii 1999:346.

Page 579 ***baikalicus*** Reitter. Add:

REFERENCES: **(bv)** Kolomiets & Bogdanova 1998. **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:350; Kulinich & Orlinskii 1998; Yanovskii 1999:346. **(ec)** Kolomiets & Bogdanova 1998. **(tx)** Krivolutskaya 1996a: 350; Yanovskii 1999:346.

Page 579 ***betulae*** Hopkins. Add:

REFERENCES: **(ds)** Peck & Thomas 1998:159.

Page 580 ***carpini*** Eggers. Add:

REFERENCES: **(ds)** Krivolutskaya 1996a:350; Yanovskii 1999:346. **(tx)** Krivolutskaya 1996a:350; Yanovskii 1999:346.

Page 580 ***confusus*** Swaine. Add:

REFERENCES: **(bv)** Camacho, Pierce, & Borden 1998; Borden 1995c; Huber et al. 1999; Stock et al. 1995. **(cn)** Borden 1995c; EPPO/CABI 1992:275, 1997:242; Garbutt 1990; Parish, Antos, & Fortin 1999. **(ds)** EPPO/CABI 1992:275, 1997:242; Haack & Cavey 1997:5. **(ec)** EPPO/CABI 1992:275; Garbutt 1990; Hansen, E. 1996; Posada F. & Vélez 1997. **(hb)** EPPO/CABI 1992:275, 1997:242; Garbutt 1990; Hansen, E. 1996. **(tx)** EPPO/CABI 1997:196.

Page 582 ***granicollis*** (LeConte).

DISTRIBUTION: NORTH AMERICA: Canada (**Manitoba**) (see Appendix).

Page 582 ***hectographus*** Reiter. Add:
FIGURES: Krivolutskaya 1996a:320 (apex of elytra); Voolma, Õunap, & Süda 1997b:33 (declivity).
DISTRIBUTION: ASIA: China (Heilongjiang, Gansu). EUROPE: Estonia, Latvia.
HOSTS: *Picea crassifolia, Pinus koraiensis.*
REFERENCES: **(cn)** Wermlinger et al. 1999. **(ds)** Holzschuh & Perny 1996:5; Krivolutskaya 1996a:351; Kulinich & Orlinskii 1998; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:34, 2000:60; Yanovskii 1999:346. **(ec)** Hedqvist 1998:78; Jakuš 1995a; Martikainen et al. 1999; Õunap 1999; Wermlinger et al. 1999; Yang 1996. **(tx)** Krivolutskaya 1996a:351; Voolma, Õunap, & Süda 1997b:34; Yanovskii 1999:346.

Page 583 ***indicus*** Stebbing. Add:
HOSTS: *Abies smithiana.*
REFERENCES: **(hb)** Singh & Bhandari 1997:658.

Page 583 ***infuscatus*** Murayama. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:352; Yanovskii 1999:346. **(tx)** Krivolutskaya 1996a:352; Yanovskii 1999:346.

Page 583 *orientalis* Kurenzov (synonym of ***infuscatus*** Murayama). Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998; Yanovskii 1999:347. **(tx)** Yanovskii 1999:347.

Page 584 ***padi*** Stark. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:350; Yanovskii 1999:347. **(tx)** Krivolutskaya 1996a:350; Yanovskii 1999:347.

Page 584 ***pini*** Niisima. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:352; Kulinich & Orlinskii 1998; Yanovskii 1999:347. **(tx)** Krivolutskaya 1996a:352; Yanovskii 1999:347.

Page 585 ***rugicollis*** Eggers. Add:
FIGURES: Krivolutskaya 1996a:320 (apex of elytra).
REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:351; Kulinich & Orlinskii 1998; Yanovskii 1999:347. **(tx)** Krivolutskaya 1996a:351; Yanovskii 1999:347.

Page 585 ***sechelti*** Swaine. Add:
REFERENCES: **(hb)** Peck, Equihua-Martinez, & Ross 1997:207.

Page 585 ***striatus*** Eggers. Add:
FIGURES: Krivolutskaya 1996a:313 (habitus).
REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:350; Kulinich & Orlinskii 1998; Yanovskii 1999:347. **(tx)** Krivolutskaya 1996a:350; Yanovskii 1999:347.

Page 585 *abietinus* Kono & Tamanuki (synonym of ***striatus*** Eggers). Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998.

Page 586 ***uniseriatus*** Eggers. Add:

REFERENCES: **(ds)** Yanovskii 1999:347. **(ec)** Chen et al. 1999. **(hb)** Chen et al. 1999. **(tx)** Yanovskii 1999:347.

Page 586 ***ussuriensis*** Eggers. Add:

REFERENCES: **(ds)** Krivolutskaya 1996a:352; Yanovskii 1999:347. **(tx)** Krivolutskaya 1996a:352; Yanovskii 1999:347.

Page 586 ***villosus*** (Fabricius). Add:

DISTRIBUTION: ASIA: Turkey. EUROPE: Latvia.

REFERENCES: **(ds)** Alexander 1997; Haack & Cavey 1997:5; Hastings 1998; Kenward & Hall 1995; Lombardero 1995:362–364; Osborne 1997; Owen 1999; Riba 1996; Roper 1996; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1997b:33. **(ec)** Haase, Topp, & Zach 1998; Hedqvist 1998:77; Magowski, Di Palma, & Khaustov 1998. **(hb)** Markalsa & Kalapanida 1997. **(tx)** Voolma, Õunap, & Süda 1997b:33.

Page 587 *sardus* Strohmeyer (synonym of ***villosus*** (Fabricius)). Add:

REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Add species: ***krivolutzkajae*** Mandelshtam 2001b:11. Holotype (♂); Verkhoturova Isle (Russia); IBSS, Vladivostok.

FIGURES: Mandelshtam 2001b (habitus).

DISTRIBUTION: Russia Far East.

HOST: in roots of *Rhodiola rosea*.

REFERENCES: **(tx)** Mandelshtam 2001b.

Genus **Dryocoetiops** Schedl

Page 587 ***eugeniae*** (Schedl). Add:

NOTES: Holotype in NHMW, not in NHML.

REFERENCES: **(tx)** Beaver 1998c:181.

Page 588 ***kepongi*** (Schedl). Add:

REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Genus **Ozopemon** Hagedorn

Page 589 ***ater*** Eggers. Add:

REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

Page 589 ***grossepunctatus*** Eggers. Add:

DISTRIBUTION: ASIA: Malaysia (Sarawak).

REFERENCES: **(ds)** Bright 2000:54.

Page 589 ***obanus*** Hagedorn. Add:

DISTRIBUTION: ASIA: Malaysia (Sarawak).

REFERENCES: **(ds)** Bright 2000:55.

Genus **Coccotrypes** Eichhoff

Page 591 **Coccotrypes** Eichhoff. Add:
REFERENCES: **(ds)** Abreu, Fonseca, & Marques 1997.

Page 592 ***advena*** Blandford. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Trang). NORTH AMERICA: Costa Rica, **Dominican Republic** (see Appendix).
HOSTS: Petiole of *Cecropia insignis*, *C. peltata*.
REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(ds)** Beaver 1999d:176; Bright 2000:55; Jordal & Kirkendall 1998; Mattson et al. 1994:12; Peck & Thomas 1998:159. **(hb)** Jordal & Kirkendall 1998.

Page 593 ***alternatus*** (Eggers). Move to **Cyrtogenius**.

Page 593 ***barbatus*** (Schedl). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
Hosts: *Saccharum spontaneum* (Kalshoven 1958b:175).
REFERENCES: **(ds)** Bright 2000:57.

Page 593 ***bicolor*** Sampson. Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Page 594 ***campnospermae*** (Browne). Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Page 594 ***cardamomi*** Schaufuss. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:57; Fukumoto & Kajimura 1999. **(hb)** Fukumoto & Kajimura 1999.

Page 594 ***carpophagus*** (Hornung). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak). NORTH AMERICA: **Dominican Republic** (see Appendix). SOUTH AMERICA: **Tobago** (see Appendix).
HOSTS: *Acacia mangium*, *Quercus variabilis*.
NOTES: Delete "Santa Cruz in Galapagos Islands" in 1997 supplement (page 131).
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Bright 2000:58; Bright & Peck 1998: 239,249; Ho & Maznah 1995; Mattson et al. 1994:12; Peck & Thomas 1998:159.

Page 597 ***cinnamomi*** (Eggers). Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Page 597 *sierraleonensis* Eggers (synonym of ***confusus*** (Eggers)). Add:
REFERENCES: **(tx)** Beaver 1995:21.

Page 598 ***corpulentus*** Browne. Add:
REFERENCES: **(ds)** Bright 2000:58.

Page 598 ***cyperi*** Beeson. Add:
FIGURES: Delete "Pfeffer 1992:619 (adult)" in 1997 supplement (page 131).
DISTRIBUTION: NORTH AMERICA: **Dominican Republic** (see Appendix).
HOSTS: Petiole of *Cecropia insignis, C. obtusifolia, C. peltata.*
REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(ds)** Jordal & Kirkendall 1998; Mattson et al. 1994:12; Peck & Thomas 1998:159. **(hb)** Jordal & Kirkendall 1998.

Page 599 ***dactyliperda*** (Fabricius). Add:
DISTRIBUTION: SOUTH AMERICA: Ecuador (Santa Cruz in Galápagos Islands).
REFERENCES: **(ds)** Bright & Peck 1998:239,249; Mattson et al. 1994:12; Peck & Thomas 1998:159.

Page 602 ***distinctus*** (Motschulsky). Add:
DISTRIBUTION: NORTH AMERICA: **Dominican Republic** (see Appendix).
REFERENCES: **(ds)** Mattson et al. 1994:12; Peck & Thomas 1998:159.

Page 603 ***fallax*** (Eggers). Add:
HOSTS: *Bruguiera* sp., *Ceriops candolleana, Rhizophora conjugata, R. mucronata.*
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 603 ***furvus*** (Sampson). Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998:158.

Page 603 ***gedeanus*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Chiangmai).
HOSTS: Leafstalks of *Macaranga* sp.
REFERENCES: **(ds)** Beaver 1999d:177; Bright 2000:58; Jordal & Kirkendall 1998.

Page 604 ***graniceps*** (Eichhoff). Add:
DISTRIBUTION: ASIA: Japan (Honshu, Kyushu).
HOSTS: Acorns of *Lithocarpus edulis & Quercus myrsinaefolia.*
REFERENCES: **(ds)** Ueda 1997. **(hb)** Ueda 1997.

Page 604 ***impressus*** Eggers. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Chiangmai, Trang).
REFERENCES: **(ds)** Beaver 1999d:177; Bright 2000:60.

Page 604 ***laticollis*** (Browne). Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Page 605 ***litoralis*** (Beeson). Add:
HOSTS: *Heritiera fomes, Rhizophora mucronata.*
REFERENCES: **(ds)** Veenakumari, Mohanraj, & Bandyopadhyay 1997. **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 605 ***longior*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
HOSTS: *Acacia mangium*.
REFERENCES: **(ds)** Bright 2000:61; Ho & Maznah 1995; Jordal & Kirkendall 1998.

Page 606 ***marginatus*** (Browne). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Trang).
HOSTS: Leafstalks of *Artocarpus* spp., *Campnosperma* sp.
REFERENCES: **(ds)** Beaver 1999d:177; Bright 2000:62; Jordal & Kirkendall 1998.

Page 606 ***medius*** Eggers. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:62; Jordal & Kirkendall 1998.

Page 606 ***myristicae*** (Roepke). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Trang).
HOSTS: Seeds of *Horsfieldia irya*, *Myristica ?elliptica*.
REFERENCES: **(ds)** Beaver 1999d:178; Bright 2000:62.

Page 607 ***nitidus*** (Eggers). Add:
DISTRIBUTION: ASIA: Thailand (Trang).
REFERENCES: **(ds)** Beaver 1999d:178.

Page 607 ***nubilus*** (Blandford). Add:
HOSTS: *Bruguiera* sp., *Rhizophora* sp.
REFERENCES: **(ds)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 608 *brevipilosus* Beeson (synonym of ***nubilus*** (Brandford)). Add:
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 608 ***palmarum*** Eggers. Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64.

Page 608 ***papuanus*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Chiangmai).
REFERENCES: **(ds)** Beaver 1999d:178; Bright 2000:62; Jordal & Kirkendall 1998.

Page 609 ***petioli*** (Browne). Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Page 609 ***rhizophorae*** (Hopkins). Add:
DISTRIBUTION: SOUTH AMERICA: Ecuador (Santa Cruz in Galápagos Islands).
HOSTS: *Acacia mangium*, *Rhizophora mucronata*.
REFERENCES: **(ds)** Bright & Peck 1998:239,249; Ho & Maznah 1995; Mattson et al. 1994:12; Peck & Thomas 1998:159. **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 610 *nepheli* Eggers (synonym of ***rhizophorae*** (Hopkins)). Add:
REFERENCES: (**ec**) Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 610 ***robustus*** Eichhoff. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:159.

Page 611 ***salakensis*** (Schedl). Add:
HOSTS: *Heritiera fomes*.
REFERENCES: (**ds**) Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 611 *opacifrons* Beeson (synonym of ***salakensis*** (Schedl)). Add:
REFERENCES: (**ec**) Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 612 ***subcribrosus*** (Blandford). Add:
REFERENCES: (**cn**) Chung 1995.

Page 613 ***tahitensis*** (Beeson). Add:
REFERENCES: (**ds**) Paulin 1998:181.

Page 614 ***variabilis*** (Beeson). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
NOTES: Delete "Fiji" from Distribution in 1992 catalog.
REFERENCES: (**ds**) Beaver 1995:21; Bright 2000:63.

Page 614 ***vulgaris*** Eggers. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
HOSTS: *Acacia mangium*.
REFERENCES: (**ds**) Bright 2000:63; Ho & Maznah 1995; Mattson et al. 1994:12; Peck & Thomas 1998:159.

granulicauda Schedl **nomen nudum**. Add:
FIGURES: Anonymous 1992a:635 (habitus).
DISTRIBUTION: ASIA: China (Hunan).
REFERENCES: (**ds**) Anonymous 1992a:635. (**tx**) Anonymous 1992a: 635.

Add species: ***amplipunctatus*** Bright 2000:55. Holotype (♀); Malaysia, Sarawak, Gunung Mulu National Park; NHML (temporarily in CNCI).
FIGURES: Bright 2000:77 (dorsal outline of pronotum).
DISTRIBUTION: ASIA: Malaysia (Sabah, Sarawak).
REFERENCES: (**tx**) Bright 2000:55.

impressostriatus Bright 2000:58. Holotype (♀); Malaysia, Sarawak, Gunung Mulu National Park; NHML (temporarily in CNCI).
FIGURES: Bright 2000:77 (dorsal outline).
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**tx**) Bright 2000:58.

limbatideclivis Bright 2000:60. Holotype (♀); Malaysia, Sarawak, Gunung Mulu National Park; NHML (temporarily in CNCI).
FIGURES: Bright 2000:77 (dorsal outline).
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**tx**) Bright 2000:60.

Add genus: **Cynanchophagus** Axentiev from Genera Incertae Sedis.

cornutus Axentiev. Add:
FIGURES: Aksent'yev 1994(1995:6) (larval features).
HOSTS: *Cynanchum tataricum*.
REFERENCES: (**tx**) Aksent'yev 1994(1995:5).

Add genus: **Dryoxylon** Bright & Rabaglia 1999:333. Type species: *Xyleborus onoharaensis* Murayama, original designation.
REFERENCES: (**tx**) Bright & Rabaglia 1999:333.

onoharaensis (Murayama) 1934:293. Lectotype (♀), Tarumidzu, Onohara, Kagoshima Pref.; Murayama Collection at USNM; designated by Bright & Rabaglia 1999:334. Add:
FIGURES: Bright & Rabaglia 1999:334 (elytral declivity, antenna, pronotal margin), 335 (tibia).
DISTRIBUTION: NORTH AMERICA: United States (Florida, Georgia, Louisiana, Maryland, Mississippi, North Carolina, **Tennessee** (see Appendix), Texas).
HOSTS: *Acer saccharum*.
NOTES: The "undescribed dryocoetine genus" in Normark, Jordal, & Farrell 1999 is this genus.
REFERENCES: (**tx**) Bright & Rabaglia 1999:333.

TRIBE CRYPTURGINI

Genus **Aphanarthrum** Wollaston

Page 616 ***aeonii*** Lindberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Genus **Crypturgus** Erichson

Page 620 **Crypturgus** Erichson. Add:
KEYS: Krivolutskaya 1996a:349 (to East Russian species); Õunap 1996 (to Estonian species); Voolma, Õunap, & Süda 1997b:34 (to Estonian species).
REFERENCES: (**ds**) Peltonen et al. 1998. (**ec**) Kula & Ząbecki 1999a, 1999b; Peltonen et al. 1998. (**tx**) Krivolutskaya 1996a:349; Voolma, Õunap, & Süda 1997b:34.

Page 620 ***alutaceus*** Schwarz. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:159.

Page 620 ***borealis*** Swaine. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: (**ds**) Bain 1999; Furniss & Johnson 1995:337. (**hb**) Furniss & Johnson 1995:337.

Page 621 ***cinereus*** (Herbst). Add:

DISTRIBUTION: EUROPE: Estonia, Latvia.

REFERENCES: **(cn)** Wermlinger et al. 1999. **(ds)** Gutowski & Kubisz 1995; Hastings 1998; Kido & Azuma 1995; Krivolutskaya 1996a:349; Kulinich & Orlinskii 1998; Lakatos 1999c; Öymen 1992; Riba 1996; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:34, 2000:61; Yanovskii 1999:347. **(ec)** Hedqvist 1998:77; Jakuš 1995a; Mokrzycki 1995a; Wermlinger et al. 1999. **(hb)** Gutowski & Kubisz 1995; Martikinen et al. 1996. **(tx)** Krivolutskaya 1996a:349; Õunap 1996; Voolma, Õunap, & Süda 1997b:34; Yanovskii 1999:347.

Page 623 *subcribrosus* Eggers (synonym of ***cinereus*** (Herbst)). Add:

REFERENCES: **(ds)** Hansen, M. 1996:211; Krivolutskaya 1996a:349; Kulinich & Orlinskii 1998; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1997a:21, 1997b:34. **(ec)** Hedqvist 1998:77; Martikainen et al. 1999. **(tx)** Krivolutskaya 1996a:349; Õunap 1996; Voolma, Õunap, & Süda 1997b:34.

Page 624 ***hispidulus*** Thomson. Add:

DISTRIBUTION: EUROPE: Estonia, Latvia.

REFERENCES: **(bv)** Nicolai 1997. **(cn)** Wermlinger et al. 1999. **(ds)** Gutowski & Kubisz 1995; Hansen, M. 1996:211; Hansen, M. et al. 1996:270; Holzschuh & Perny 1996:5; Krivolutskaya 1996a:349; Kulinich & Orlinskii 1998; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:34, 2000:62; Yanovskii 1999:348. **(ec)** Bakke 1996; Hedqvist 1998:77; Martikainen et al. 1999; Mokrzycki 1995a; Nicolai 1996; Wermlinger et al. 1999. **(hb)** Gutowski & Kubisz 1995; Nicolai 1995b, 1996, 1997. **(tx)** Krivolutskaya 1996a:349; Õunap 1996; Voolma, Õunap, & Süda 1997b:34; Yanovskii 1999:348.

Page 624 ***mediterraneus*** Eichhoff. Add:

HOSTS: *Pinus sylvestris*.

REFERENCES: **(ds)** Haack & Cavey 1997:5; Lombardero 1995:359,360; Öymen 1992; Riba 1996.

Page 625 ***numidicus*** Ferrari. Add:

HOSTS: *Abies alba*.

REFERENCES: **(bv)** Markalas 1997. **(ds)** Markalas 1997:59; Öymen 1992; Riba 1996.

Page 625 ***pusillus*** (Gyllenhal). Add:

DISTRIBUTION: EUROPE: Estonia, Italy, Latvia.

REFERENCES: **(cn)** Wermlinger et al. 1999. **(ds)** Bordoni 1995:43; Gutowski & Kubisz 1995; Hansen, M. 1996:211; Hansen, M. et al. 1997:92; Hastings 1998; Holzschuh & Perny 1996:5; Kido & Azuma 1995; Krivolutskaya 1996a:349; Kulinich & Orlinskii 1998; Mattson et al. 1994:12; Öymen 1992; Podlussány 1998:304; Riba 1996; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:34, 2000:62; Yanovskii 1999:348. **(ec)** Bakke 1996; Hedqvist 1998:77; Jakuš 1995a; Kirschner & Oberwinkler 1998; Mokrzicki 1995; Wermlinger et al. 1999. (**hb**) Gutowski & Kubisz 1995; Klimetzek & Schlenstedt 1991. (**tx**) Krivolutskaya 1996a:349; Õunap 1996; Voolma, Õunap, & Süda 1997b:34; Yanovskii 1999:348.

Page 629 *crebellus* Reitter (synonym of ***pusillus*** (Gyllenhal)). Add:
REFERENCES: (**ds**) Hastings 1998; Lombardero 1995:359.

Page 629 *maulei* Roubal (synonym of ***pusillus*** (Gyllenhal)). Add:
REFERENCES: (**ds**) Kulinich & Orlinskii 1998.

Page 629 ***tuberosus*** Niisima. Add:
REFERENCES: (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a:349; Kulinich & Orlinskii 1998; Yanovskii 1999:348. (**tx**) Krivolutskaya 1996a:349; Yanovskii 1999:348.

TRIBE XYLOTERINI

Genus **Trypodendron** Stephens

Page 632 **Trypodendron** Stephens. Add:
KEYS: Krivolutskaya 1996a:357 (to East Russian species); Voolma 1996 (to Estonian species); Voolma, Õunap, & Süda 1997b:34 (to Estonian species).
REFERENCES: (**ds**) Voolma 1996. (**ec**) Nakashima 1999. (**tx**) Krivolutskaya 1996a:357; Voolma 1996; Voolma, Õunap, & Süda 1997b:34.

Page 632 *ashuensis* (Murayama). Move to ***Indocryphalus majus*** (Eggers) as a synonymn.
Add: LECTOTYPE ♂, Takeuchi [Japan]; USNM; designated by Beaver 2000: 174.
SYNONYMY: Beaver 2000:174.

Page 632 ***betulae*** Swaine. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: (**ds**) Furniss & Johnson 1995:338; Katovich & Ostry 1998:102.

Page 633 ***domesticum*** (Linnaeus). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:35 (antenna).
DISTRIBUTION: EUROPE: Estonia, Latvia, Slovakia. NORTH AMERICA: Canada (British Columbia [introduced & established], Prince Edward Island [introduced, established?]).
REFERENCES: (**bv**) Hrašovec 1998; Schmidt, Schmidt, & Fisher 1997; Schmidt, Schmidt, & Mucha 1999. (**cn**) Wermlinger et al. 1999. (**ds**) Alexander 1997; Gutowski & Kubisz 1995; Hansen, M. 1996:212; Holecovà & Zach 1998; Hrašovec 1998; Lombardero 1995:361, 362,364–366; Öymen 1992; Ponel 1995; Riba 1996; Shore & McLean 1995; Telnov et al. 1997:135; Voolma 1996:142; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:34, 2000:63. (**ec**) Haase, Topp, & Zach 1998; Hedqvist 1998:78; Martikainen et al. 1999; Nicolai 1996; Wermlinger et al. 1999. (**hb**) Gutowski & Kubisz 1995; Haase,

Topp, & Zach 1998; Nicolai 1996. **(tx)** Voolma 1996:142; Voolma, Õunap, & Süda 1997b:34.

Page 635 ***gaimaensis*** (Murayama). Add:

REFERENCES: **(ds)** Yanovskii 1999:348. **(tx)** Yanovskii 1999:348.

Page 635 ***laeve*** Eggers. Add:

FIGURES: Holzschuh 1990a (habitus), 1990b (♂ genitalia).

DISTRIBUTION: EUROPE: Austria, Estonia.

REFERENCES: **(bv)** Holzschuh 1990a. **(cn)** Cech & Krehan 1997; **(ds)** Holzschuh 1990a, 1990b, 1995:135; Krehan & Holzschuh 1999; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 2000:63. **(ec)** Hedqvist 1998:78. **(hb)** Krehan & Holzschuh 1999. **(tx)** Holzschuh 1990b.

Page 636 ***lineatum*** (Olivier). Add:

FIGURES: Holzschuh 1990b (♂ genitalia); Voolma, Õunap, & Süda 1997b:35 (antenna).

DISTRIBUTION: EUROPE: Estonia, Latvia.

HOSTS: *Pinus armandi*.

REFERENCES: **(bv)** Borden 1995c; Borden et al. 1997; Diminic et al. 1996; Jakuš 1998a, 1998b, 1998c; Kelsey & Joseph 1997; Kirkendall, Kent, & Raffa 1997; Kolomiets & Bogdanova 1998; Mihalciuc 1990; Mihalciuc, Mircioiu, & Bujila 1998; Peltonen, Heliövaara, & Väisänen 1997; Podlaski 1998; Schmidt, Schmidt, & Fisher 1997; Schmidt, Schmidt, & Mucha 1999; Shore 1998; Shore & Lindgren 1996; Skillen et al. 1997:9; Starzyk 1996:29. **(cn)** Babuder & Pohleven 1995c; Babuder, Pohleven, & Brelih 1996; Bobat 1997; Borden 1995c; Dajoz 1998:447; Diminic et al. 1996; Gavrilovic & Korpic 1992; Hrašovec 1995; Hrašovec & Harapin 1999; Kleinevoss, Topp, & Bohac 1996; Majunke, Walter, & Heydeck 1997; Mihalache, Mihalciuc, & Ciornei 1997; Mihalciuc 1990, 1997; Mihalciuc, Mircioiu, & Bujila 1998; Podlaski 1998; Prazak 1997; Shore 1998; Starzyk 1996; Turani 1998; Watzek & Niemeyer 1996; Wermlinger et al. 1999; Zahradník 1997, 1998a; Zahradník & Knížek 1999; Zahradník et al. 1995:8; Zúbrik et al. 1999. **(ds)** Bain 1999; Gutowski & Kubisz 1995; Hansen, M. 1996:212; Hastings 1998; Holzschuh 1990b; Kido & Azuma 1995; Kirkendall, Kent, & Raffa 1997; Krivolutskaya 1996a:358; Kulinich & Orlinskii 1998; Lemdahl 1997; Öymen 1992; Peltonen et al. 1998; Riba 1996; Safranyik 1995; Shore & McLean 1995; Sippola, Siitonen, & Kallio 1995; Telnov et al. 1997:135; Voolma 1996:143; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:35, 2000:64; Yanovskii 1999:348. **(ec)** Babuder & Pohleven 1993, 1995a, 1995b; Bakke 1996; Chen et al. 1999; Dajoz 1998:447; Ehnström, Långström, & Hellqvist 1995; Hedqvist 1998:78; Jakuš 1995a, 1998a, 1998b, 1998c; Kolomiets & Bogdanova 1998; Kula & Ząbecki 1997b, 1999a, 1999b; Kurtzman & Robnett 1998; Martikainen et al. 1999; McIntosh & McLean 1997; Mokrzycki 1995a; Nicolai 1996; Peltonen, Heliövaara, & Väisänen 1997; Peltonen et al. 1998; Prazak 1997; Riba & Blas 1995; Shore 1998; Szmidt & Luterek 1999; Wermlinger & v. Hirschheydt 1996; Wermlinger et al. 1995, 1999. **(hb)** Dajoz 1998:447; Gutowski & Kubisz 1995; McIntosh & McLean 1997; Nicolai 1996; Peck, Equihua-Martinez,

& Ross 1997:207; Peltonen, Heliövaara, & Väisänen 1997; Schroeder et al. 1999; Shore 1998; Shore & McLean 1995; Wermlinger & v. Hirschheydt 1996. (**tx**) Holzschuh 1990b; Krivolutskaya 1996a:358; Voolma 1996:143; Voolma, Õunap, & Süda 1997b:35; Yanovskii 1999:348.

Page 643 ***granulatum*** Eggers (synonym of ***lineatum*** (Olivier)). Add:
REFERENCES: (**ds**) Krivolutskaya 1996a:358; Kulinich & Orlinskii 1998; Yanovskii 1999:348. (**tx**) Krivolutskaya 1996a:358; Yanovskii 1999:348.

Page 644 ***niponicum*** Blandford. Add:
REFERENCES: (**ds**) Krivolutskaya 1996a:358; Yanovskii 1999:349. (**tx**) Krivolutskaya 1996a:358; Yanovskii 1999:349.

Page 644 ***proximum*** (Niisima). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:35 (antenna).
DISTRIBUTION: EUROPE: Estonia.
REFERENCES: (**ds**) Kido & Azuma 1995; Krivolutskaya 1996a:358; Kulinich & Orlinskii 1998; Voolma 1996:144; Voolma & Süda 1999:191; Voolma & Mandelshtam 1998; Voolma, Õunap, & Süda 1997a:21, 1997b: 35; Voolma, Süda, & Õunap 1996:130, 1998:76; Yanovskii 1999:349. (**ec**) Martikainen et al. 1999. (**tx**) Krivolutskaya 1996a:358; Voolma 1996: 144; Voolma, Õunap, & Süda 1997b:35; Yanovskii 1999:349.

Page 644 ***pulchellum*** (Murayama). Add:
REFERENCES: (**tx**) Beaver 2000:176.

Page 644 ***retusum*** (LeConte). Add:
REFERENCES: (**ds**) Shore & McLean 1995.

Page 645 ***rufitarsus*** (Kirby). Add:
REFERENCES: (**ds**) Shore & McLean 1995.

Page 645 ***scabricollis*** (LeConte). Add:
DISTRIBUTION: NORTH AMERICA: United States (**Oklahoma**) (see Appendix).

Page 646 ***signatum*** (Fabricius). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:35 (antenna).
DISTRIBUTION: ASIA: Iran (Giln). EUROPE: Estonia, Latvia.
REFERENCES: (**bv**) Brattli, Anderson, & Nilssen 1998; Hrašovec 1998; Kolomiets & Bogdanova 1998. (**cn**) Baganich 1997; Gogola et al. 1999. (**ds**) Borumand 1998:93; Hansen, M. 1996:212; Hansen, M., Pedersen, & Pritzl 1999:100; Hrašovec 1998; Öymen 1992; Peltonen et al. 1998; Riba 1996; Telnov et al. 1997:135; Voolma 1996:143; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:35, 2000:64; Yanovskii 1999:349. (**ec**) Haase, Topp, & Zach 1998; Hedqvist 1998:78; Kolomiets & Bogdanova 1998; Martikainen et al. 1999; Peltonen et al. 1998. (**hb**) Haase, Topp, & Zach 1998; Markalas & Kalapanida 1997; Martikinen et al. 1996. (**tx**) Voolma 1996:143; Voolma, Õunap, & Süda 1997b:35; Yanovskii 1999:349.

Page 648 *suturale* Eggers (synonym of ***signatum*** (Fabricius)). Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:358. **(tx)** Krivolutskaya 1996a:358.

Genus **Indocryphalus** Eggers

Page 648 **Indocryphalus** Eggers. Add:
KEYS: Beaver 2000:169 (entire genus); Krivolutskaya 1996a:358 (to East Russian species).
REFERENCES: **(tx)** Beaver 2000; Krivolutskaya 1996a:358.

Page 648 ***aceris*** (Niisima). Add *dainichiensis* (Murayama) as a synonym. Add:
FIGURES: Beaver 2000:179 (elytron).
HOSTS: *Fagus crenata*.
REFERENCES: **(ds)** Beaver 2000:172; Krivolutskaya 1996a:359; Yanovskii 1999:349. **(tx)** Beaver 2000:172; Krivolutskaya 1996a:359; Yanovskii 1999:349.

Page 648 *dainichiensis* (Murayama). Move to ***aceris*** (Niijima) as a synonym. Add:
SYNONYMY: Beaver 2000:172.

Page 648 ***intermedius*** (Sampson). Add:
LECTOTYPE ♀, Darjeeling; NHML; designated by Beaver 2000:173.
HOSTS: *Abies webbiana*, *Persea edulis*.
REFERENCES: **(ds)** Beaver 2000:172. **(tx)** Beaver 2000:172.

Page 648 ***majus*** (Eggers). Add *Trypodendron ashuensis* Murayama as a synonym. Add:
FIGURES: Beaver 2000:179 (mycangial opening, elytron).
HOSTS: *Acer* sp., *Hamamelis japonica*.
REFERENCES: **(ds)** Beaver 2000:174. **(tx)** Beaver 2000:174.

Page 648 ***pubipennis*** (Blandford). Add:
LECTOTYPE ♀, Japan; NHML; designated by Beaver 2000:175.
FIGURES: Beaver 2000:179 (mycangial opening).
REFERENCES: **(ds)** Krivolutskaya 1996a:359; Yanovskii 1999:349. **(tx)** Beaver 2000:175; Krivolutskaya 1996a:359; Yanovskii 1999:349.

Page 649 *sinensis* (Eggers). Move to ***sordidus*** (Blandford) as a synonym. Add:
TYPE DEPOSITORY: Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany.
SYNONYMY: Beaver 2000:175.

Page 649 ***sordidus*** (Blandford). Add *Trypodendron sinense* Eggers as a synonym. Add:
REFERENCES: **(ds)** Beaver 2000:175. **(tx)** Beaver 2000:175.

Page 649 ***tropicus*** (Browne). Add:
DISTRIBUTION: ASIA: Indonesia (Sulawesi), Malaysia (Sabah).
REFERENCES: **(ds)** Beaver 2000:176. **(tx)** Beaver 2000:176

Add species: ***pasohensis*** Beaver 2000:167. Holotype (♀); Malaysia, Pen[insular] Malaysia, Negeri Sembilan, Pasoh forest reserve; FRIM.

FIGURES: Beaver 2000:179 (♂, ♀ frons).

DISTRIBUTION: ASIA: Malaysia (Negeri Sembilan).

REFERENCES: **(tx)** Beaver 2000:167.

Genus **Xyloterinus** Swaine

Page 649 ***politus*** (Say). Add:

DISTRIBUTION: NORTH AMERICA: United States Washington (introduced).

REFERENCES: **(ds)** Bain 1999; Katovich & Ostry 1998:102; LaGasa, Furniss, & Kamping 1997:4; Shore & McLean 1995.

TRIBE XYLEBORINI

Page 651 **Xyleborini**. Add:

KEYS: Lombardero 1996 (to genera in Iberian Peninsula).

REFERENCES: **(an)** Normark, Jordal, & Farrell 1999. **(tx)** Lombardero 1996.

Genus **Premnobius** Eichhoff

Page 651 ***ambitiosus*** (Schaufuss). Add:

REFERENCES: **(ds)** Mezzomo et al. 1998:84. **(hb)** Dall'Oglio & Filho 1997.

Page 651 ***cavipennis*** Eichhoff. Add:

DISTRIBUTION: NORTH AMERICA: **Bahamas (Andros Island)** (see Appendix), Dominica.

REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64; Morales et al. 1999. **(ds)** Abreu, Fonseca, & Marques 1997; Cognato & Bright 1996:72; Flechtmann & Ottati 1996; Mattson et al. 1994:12; Mezzomo et al. 1998:84; Peck & Thomas 1998:159. **(hb)** Dall'Oglio & Filho 1997; Morales et al. 1999.

Page 653 *binodosus* Nunberg (synonym of ***corthyloides*** Hagedorn). Add:

REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

Genus **Sampsonius** Eggers

Page 655 **Sampsonius** Eggers. Add:

REFERENCES: **(ds)** Abreu, Fonseca, & Marques 1997.

Page 655 ***dampfi*** Schedl. Add:
REFERENCES: **(cn)** Morales et al. 1999. **(ds)** Abreu, Fonseca, & Marques 1997; Flechtmann & Ottati 1996; Mezzomo et al. 1998:84. **(hb)** Dall'Oglio & Filho 1997; Morales et al. 1999.

Page 655 *costaricensis* Nunberg (synonym of ***damphi*** Schedl). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

Page 1405 ***pedrosai*** Schönherr. Add:
REFERENCES: **(ds)** Mezzomo et al. 1998:84.

Genus **Dryocoetoides** Hopkins

Page 657 ***cristatus*** (Fabricius). Add:
DISTRIBUTION: NORTH AMERICA: **Dominican Republic** (see Appendix). SOUTH AMERICA: **Tobago** (see Appendix).

Page 658 ***obtusitrunctatus*** (Schedl). Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64.

Page 658 ***paradoxus*** (Schedl). Add:
DISTRIBUTION: SOUTH AMERICA: **Equador** (Napo) (see Appendix).

Genus **Leptoxyleborus** Wood

Page 659 ***concisus*** (Blandford). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Trang).
HOSTS: *Nypa fruticans.*
REFERENCES: **(ds)** Beaver 1999d:181; Bright 2000:68; Maetô, Fukuyama, & Kirton 1999; Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 659 *incurvus* Eggers (synonym of ***concisus*** (Blandford)). Add:
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 660 *sejugatus* Schedl (synonym of ***depressus*** (Eggers)). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 660 ***puer*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sumatra).
REFERENCES: **(ds)** Bright 2000:63.

Page 660 ***punctatissimus*** (Eichhoff). Add:
DISTRIBUTION: ASIA: Malaysia (Sumatra).
REFERENCES: **(ds)** Bright 2000:64.

Genus **Theoborus** Hopkins

Page 661 *solitariceps* Schedl (synonym of ***ricini*** (Eggers)). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:159.

Page 661 ***villosulus*** (Blandford). Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64. **(hb)** Dall'Oglio & Filho 1997.

Genus **Coptoborus** Hopkins

Page 663 ***catulus*** (Blandford). Add:
DISTRIBUTION: SOUTH AMERICA: **Peru** (see Appendix).
REFERENCES: **(bv)** Flechtmann, Ottati, & Berisford 1999.

Page 663 ***cuneatus*** (Eichhoff). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:59.

Page 663 ***longispinis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:46.

Page 664 ***pseudotenuis*** (Schedl). Add:
DISTRIBUTION: NORTH AMERICA: **Trinidad** (see Appendix).

Page 664 ***tolimanus*** (Eggers). Add:
REFERENCES: **(ds)** Abreu, Fonseca, & Marques 1997. **(hb)** Dall'Oglio & Filho 1997.

Page 665 *fallaciosus* Schedl (synonym of ***usagaricus*** (Eggers)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:59.

Genus **Arixyleborus** Hopkins

Page 666 ***dipterocarpi*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:18.

Page 666 ***granifer*** (Eichhoff). Add:
DISTRIBUTION: ASIA: Malaysia (Sumatra).
REFERENCES: **(ds)** Bright 2000:64; Maetô, Fukuyama, & Kirton 1999. **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 666 ***granulifer*** (Eggers). Add:
HOSTS: *Acacia mangium*.
DISTRIBUTION: ASIA: Malaysia (Sabah, Sumatra).
REFERENCES: **(ds)** Bright 2000:65; Ho & Maznah 1995; Maetô, Fukuyama, & Kirton 1999.

Page 667 ***iriani*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:19.

Page 667 ***magnus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:20.

Page 668 ***medius*** (Eggers). Add:
DISTRIBUTION: ASIA: Thailand (Trang).
REFERENCES: **(ds)** Beaver 1999d:176.

Page 668 ***minor*** (Eggers). Add:
REFERENCES: **(ds)** Maetô, Fukuyama, & Kirton 1999.

Page 668 ***okadai*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:21.

Page 668 ***rugosipes*** Hopkins. Add:
DISTRIBUTION: ASIA: Malaysia (Sabah).
HOSTS: *Acacia mangium*.
REFERENCES: **(ds)** Ho & Maznah 1995; Maetô, Fukuyama, & Kirton 1999.

Page 669 ***suturalis*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sabah).
HOSTS: *Acacia mangium*.
REFERENCES: **(ds)** Ho & Maznah 1995.

Page 669 ***talauricus*** (Eggers). Move to **Webbia**.

Genus **Ambrosiodmus** Hopkins

Page 670 ***apicalis*** (Blandford). Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:360; Yanovskii 1999:350. **(tx)** Krivolutskaya 1996a:360; Yanovskii 1999:350.

Page 672 ***catharinensis*** (Eggers). Add:
HOSTS: *Araucaria angustifolia*.
REFERENCES: **(ds)** Borges 1990:203.

Page 672 ***conspectus*** (Schedl). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:59.

Page 673 ***devexulus*** (Wood). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:159.

Page 674 ***hagedorni*** (Iglesias). Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Flechtmann & Ottati 1996. **(hb)** Dall'Oglio & Filho 1997.

Page 675 ***lecontei*** Hopkins. Add:
DISTRIBUTION: North America: Cuba.
HOSTS: *Coffea* sp.
REFERENCES: **(ds)** Peck & Thomas 1998:159; Vázquez, Tur, & Monteagudo 1996.

Page 675 ***lewisi*** (Blandford). Add:
REFERENCES: **(ds)** Maetô, Fukuyama, & Kirton 1999; Mattson et al. 1994:12; Yanovskii 1999:349. **(tx)** Yanovskii 1999:349.

Page 677 ***obliquus*** (LeConte). Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Abreu, Fonseca, & Marques 1997; Peck & Thomas 1998:159. **(hb)** Dall'Oglio & Filho 1997.

Page 678 ***opimus*** (Wood). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:159.

Page 679 ***rubricollis*** (Eichhoff). Add:
FIGURES: Anonymous 1992a:637 (habitus).
REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(ds)** Anonymous 1992a:637; Peck & Thomas 1998:159; Yanovskii 1999:351. **(tx)** Anonymous 1992a:637; Yanovskii 1999:351.

Page 680 ***rusticus*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: **Guatemala**, **Honduras** (see Appendix). SOUTH AMERICA: **French Guiana** (see Appendix).

Page 680 ***tachygraphus*** (Zimmermann). Add:
DISTRIBUTION: NORTH AMERICA: United States (Arkansas, Louisana).
REFERENCES: **(ds)** Chapin & Oliver 1986; Peck & Thomas 1998:159.

Add species: ***katangensis*** (Eggers). From **Xyleborus**. Add:
REFERENCES: **(tx)** Beaver 1998c:186.

rhodesianus (Eggers). Add:
SYNONYMY: Beaver & Löyttyniemi 1989:287.
NOTES: Synonymy omitted in 1992 catalog and 1997 supplement.
REFERENCES: **(tx)** Beaver 1998c:186.

luteus (Schedl). From **Xyleborus**. Add:
SYNONYMY: Beaver & Löyttyniemi 1989:287.
NOTES: Synonymy omitted in 1992 catalog and 1997 supplement.
REFERENCES: **(tx)** Beaver 1998c:186.

Genus **Amasa** Lea

Page 682 ***amputatus*** (Blandford). Add:
FIGURES: Anonymous 1992a:637 (declivity).
REFERENCES: **(ds)** Anonymous 1992a:637. **(ec)** Kajimura 1998. **(tx)** Anonymous 1992a:637.

Page 684 *abruptus* Eggers (synonym of ***resectus*** (Eggers)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:59.

Add species: ***darwini*** (Schedl). From **Xyleborus**. Add:
REFERENCES: (**tx**) Beaver 1998c:183.

Genus **Euwallacea** Hopkins

Page 686 ***artelaevis*** (Schedl). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: (**tx**) Beaver 1998c:188.

Page 687 ***bicolor*** (Blandford). Add:
DISTRIBUTION: ASIA: Thailand (Trang).
REFERENCES: (**ds**) Beaver 1999d:179. (**ec**) Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 687 ***comptus*** (Sampson). Move to **Coptodryas**.

Page 687 ***destruens*** (Blandford). Add:
DISTRIBUTION: ASIA: Malayasia (Sarawak).
REFERENCES: (**ds**) Bright 2000:68.

Page 688 ***fornicatus*** (Eichhoff). Add:
REFERENCES: (**an**) Kumar, Hewavitharanage, & Adikaram 1998. (**bv**) Bright 1997a. (**cn**) Bright 1997a; Hewavitharanage, Karunaratne, & Kumar 1999; Muraleedharan & Radhakrishnan 1989; Muraleedharan & Selvasundaram 1996; Muraleedharan & Varatharajan 1988. (**ds**) Bright 1997a. (**ec**) Bright 1997a; Hewavitharanage, Karunaratne, & Kumar 1999; Kumar, Hewavitharanage, & Adikaram 1998; Kumar et al. 1995. (**hb**) Bright 1997a. (**tx**) Węgrzynowicz & Mokrzycki 1996:60.

Page 690 ***interjectus*** (Blandford). Add:
FIGURES: Anonymous 1992a:638 (habitus).
DISTRIBUTION: ASIA: Mayaysia (Sarawak, **Selangor** (see Appendix)).
References: (**an**) Goto 1998. (**ds**) Anonymous 1992a:638; Bright 2000:70. (**ec**) Goto 1998. (**tx**) Anonymous 1992a:638.

Page 691 ***laevis*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**ds**) Bright 2000:70.

Page 692 ***piceus*** (Motschulsky). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**ds**) Bright 2000:71.

Page 694 ***subparallelus*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**ds**) Bright 2000:74.

Page 694 ***validus*** (Eichhoff). Add:
FIGURES: Anonymous 1992a:638 (declivity).
DISTRIBUTION: NORTH AMERICA: United States (Louisiana).

REFERENCES: **(an)** Goto 1998. **(cn)** Mizobuchi et al. 1996; Soma et al. 1997, 1998. **(ds)** Anonymous 1992a:638; Chapin & Oliver 1986; Mattson et al. 1994:14. **(ec)** Goto 1998. **(tx)** Anonymous 1992a:638.

Page 695 ***xanthopus*** (Eichhoff). Add:
DISTRIBUTION: ASIA: Thailand (Chiangmai).
REFERENCES: **(ds)** Beaver 1999d:180.

Add species: ***subemarginatus*** (Eggers). From **Xyleborus**. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
NOTES: Delete pre-1940 references by Beeson, Eggers, and Hagedorn. They refer to *Xyleborus submarginatus* Blandford, a synonym of *X. similis* Ferrari.
REFERENCES: **(ds)** Bright 2000:74. **(tx)** Beaver 1998c:183,186.

Genus **Cyclorhipidion** Hagedorn

Page 699 ***destrictum*** (Schedl). Move to **Coptodryas**.

Page 700 ***mangoense*** (Schedl). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 701 ***planotruncatum*** (Schedl). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 701 ***polyodon*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:71.

Page 701 ***pruinosum*** (Blandford). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:7.

Page 702 ***punctilicolle*** (Schedl). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 702 ***scapulare*** (Schedl). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 702 ***scorpium*** (Schedl). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 702 ***sisyrnophorum*** (Hagedorn). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:7.

Genus **Xyleborus** Eichhoff

Page 704 **Xyleborus** Eichhoff. Add ***Mesoscolytus*** Broun as a synonym. Add:
KEYS: Krivolutskaya 1996a:359 (to East Russian species); Lombardero 1996 (to species in Iberian peninsula); Voolma, Õunap, & Süda 1997b:35 (to Estonian species).
HOSTS: *Macadamia* sp.
REFERENCES: **(bv)** Bright 1997c. **(cn)** Baganich 1997; Bright 1997c; Chandrika 1999; Chung 1995; Coto 1999; Gogola et al. 1999; Hardi 1997; Otsamo et al. 1999; Sukartana 1992, 1994, 1997. **(ds)** Abreu, Fonseca, & Marques 1997; Bright 1997c; Smith 1998:67. **(ec)** Bright 1997c; Dajoz 1998:451; Nakashima 1999; Sukartana 1994. **(hb)** Bright 1997c; Dajoz 1998:451. **(tx)** Beaver 1998c:181; Krivolutskaya 1996a: 359; Lombardero 1996; Voolma, Õunap, & Süda 1997b:35.

Page 704 *Xyleborips* Reitter. Remove from synonymy with ***Xyleborus***, move to ***Monarthrum*** as a synonym. Add:
REFERENCES: **(tx)** Mandelshtam 2001a:203.

Page 705 ***adamsoni*** Beeson. Add:
FIGURES: Paulin 1998:180 (habitus, declivity).
REFERENCES: **(ds)** Paulin 1998:180.

Page 706 ***adusticollis*** (Motschulsky). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:67.

Page 706 *vestitus* Schedl (synonym of ***adusticollis*** (Motschulsky)). Add:
REFERENCES: **(ds)** Maetô, Fukuyama, & Kirton 1999.

Page 706 *aequalis* (Reitter). Move to ***dispar*** (Fabricius) as a synonymn. Add:
SYNONYMY: Mandelshtam 2001a:203.

Page 706 ***affinis*** Eichhoff. Add:
DISTRIBUTION: SOUTH AMERICA: Ecuador (Floreana, Isabela, Pinta, San Cristobal, Santa Cruz, Santiago in Galápagos Islands).
HOSTS: *Acacia mangium*, *Eschweilera odora*, *Khaya nyasica*, *Milicia excelsa*.
REFERENCES: **(bv)** Burgos-Solorio 1998; Flechtmann & Gaspareto 1997b:64; Flechtmann, Dalusky, & Berisford 1999; Flechtmann, Ottati, & Berisford 1999; Jordal & Kirkendall 1998; Madoffe & Bakke 1995. **(cn)** Flechtmann & Gaspareto 1997b:64; Madoffe & Bakke 1996; Morales et al. 1999. **(ds)** Abreu, Fonseca, & Marques 1997; Bain 1998: 39, 1999; Bright & Peck 1998:241,249; Flechtmann & Ottati 1996; Ho & Maznah 1995; Jordal & Kirkendall 1998; Maetô, Fukuyama, & Kirton 1999; Mattson et al. 1994:12; Mezzomo et al. 1998:84; Peck & Thomas 1998:159; Shore & McLean 1995. **(hb)** Abreu & Bandeira 1992; Dall'Oglio & Filho 1997; Jordal & Kirkendall 1998; Madoffe & Bakke 1996; Morales et al. 1999.

Page 709 *proximus* Eggers (synonym of ***affinis*** Eichhoff). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 709 ***agathis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:49.

Page 709 ***aglaiae*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:49.

Page 709 ***alluaudi*** Schaufuss. Add:
HOSTS: *Cedrela mexicana*, *Khaya nyasica*.
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(cn)** Madoffe & Bakke 1996. **(hb)** Madoffe & Bakke 1995, 1996.

Page 711 ***amphicauda*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:50.

Page 711 ***amphicranoides*** Hagedorn. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:67. **(tx)** Kikata, Hijii, & Kajimura 1994:51.

Page 711 ***anisopterae*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:52.

Page 712 ***apertus*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sabah).
HOSTS: *Acacia mangium*.
REFERENCES: **(ds)** Ho & Maznah 1995.

Page 712 ***apiculatus*** Schedl. Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 712 ***aquilus*** Blandford. Add:
REFERENCES: **(ds)** Yanovskii 1999:350. **(tx)** Yanovskii 1999:350.

Page 713 ***asper*** Eggers. Add:
DISTRIBUTION: SOUTH AMERICA: **Peru**, **Tobago** (see Appendix).

Page 713 ***atratus*** Eichhoff. Add:
REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(ds)** Mattson et al. 1994:12; Peck & Thomas 1998:159; Yanovskii 1999:350. **(tx)** Yanovskii 1999:350.

Page 714 ***biconicus*** Eggers. Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(bv)** Flechtmann & Gaspareto 1997b:64.

Page 715 ***bidentatus*** (Motschulsky). Add:
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 715 *riehli* Eichhoff (synonym of ***bidentatus*** (Motschulsky)). Add:
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 716 ***bodoanus*** Reitter. Add:
Lectotype ♀; Siberia orient., Sotka-Gora; NHMB (designated by Mandelshtam 2001a:203).
REFERENCES: **(ds)** Yanovskii 1999:350. **(tx)** Mandelshtam 2001a:203; Yanovskii 1999:350.

punctulatus Kurenzov. Add:
SYNONYMY: Mandelshtam 2001a:203.
NOTES: Lectotype (♀) designated by Mandelshtam 2001a:203.
REFERENCES: **(ds)** Krivolutskaya 1996a:361; Yanovskii 1999:351. **(tx)** Krivolutskaya 1996a:361; Mandelshtam 2001a:203; Yanovskii 1999:351.

Page 716 ***borneensis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:53.

Page 716 ***brunneus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:54.

Page 716 ***californicus*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: United States (Arkansas, Delaware, Maryland, South Carolina, Washington).
REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(ds)** LaGasa, Furniss, & Kamping 1997:4; Vandenberg, Rabaglia, & Bright 2000.

Page 716 ***canarii*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:54.

Page 716 ***canarivorus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:55.

Page 717 ***cavatus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:56.

Page 717 ***cavuloides*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:57.

Page 717 ***celsus*** Eichhoff. Add:
REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(ds)** Peck & Thomas 1998:159; Shore & McLean 1995.

Page 718 ***ciliatoformis*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:67.

Page 719 ***cognatus*** Blandford. Add:
HOSTS: ***Bruguiera parviflora*, *Excoecaria*** sp.
REFERENCES: **(ds)** Veenakumari, Mohanraj, & Bandyopadhyay 1997. **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 719 ***concentus*** Wood. Add:
DISTRIBUTION: SOUTH AMERICA: **Ecuador** (see Appendix).

Page 720 ***conidens*** Eggers. Add:
DISTRIBUTION: ASIA: India (Chikmalagur).
HOSTS: *Coffea canephora.*
REFERENCES: (**ds**) Seetharama, Venkatesha, & Balakrishnan 1996.

Page 721 ***cryptographus*** (Ratzeburg). Add:
FIGURES: Lombardero 1996:179 (pronotum ♂); Voolma, Õunap, & Süda 1997b:35 (♀ habitus).
DISTRIBUTION: EUROPE: Belgium, Estonia, Latvia, Russia (Karelia).
REFERENCES: (**ds**) Deledicque 1998; Gutowski & Kubisz 1995; Hansen, M. 1996:212; Lombardero 1996:178; Siitonen et al. 1996; Telnov et al. 1997:135; Voolma 1996:146; Voolma, Õunap, & Süda 1996: 130, 1997a:21, 1997b:36, 2000:65; Yanovskii 1999:350. (**ec**) Hedqvist 1998:79. (**hb**) Gutowski & Kubisz 1995; Lombardero 1996:178. (**tx**) Lombardero 1996:178; Voolma, Õunap, & Süda 1997b:36; Yanovskii 1999:350.

Page 722 ***curvatus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:57.

Page 723 ***cylindromorphus*** Eggers. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**ds**) Bright 2000:68.

Page 723 ***darwini*** Schedl. Move to **Amasa**.

Page 723 ***dentatulus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:58.

Page 724 ***dentipennis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:59.

Page 724 ***depressurus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:59.

Page 725 ***discretus*** Eggers. Add:
DISTRIBUTION: NORTH AMERICA: **Panama** (see Appendix).

Page 725 ***dispar*** (Fabricius). Add:
FIGURES: Lombardero 1996:179 (♂ pronotum, ♀ head), 181 (aedeagus), 182 (gallery pattern); Lombardero & Fernández de Ana Magán 1997:179 (adult ♂ & ♀); Voolma, Õunap, & Süda 1997b:35 (♀ habitus), 36 (♂ habitus).
DISTRIBUTION: ASIA: China (Shaanxi), Iran (Giln). EUROPE: Estonia, Latvia.
HOSTS: *Quercus* sp.
REFERENCES: (**an**) Lagowska & Winierska 1997. (**bv**) Hrašovec 1998; Lombardero & Fernández de Ana Magán 1997:182; Perny 1998. (**cn**) Keimer 1990; Lombardero & Fernández de Ana Magán 1997; Morone & Scortichini 1998; Nachtigall 1993; Öymen 1992; Perkons & Kontrolevich 1998; Perny 1998; Skiba & Parii 1989; Virscek & Stamper 1999; Wermlinger et al. 1999. (**ds**) Borumand 1998:94; Dinnin 1997; Gutowski & Kubisz 1995; Hansen, M. 1996:212; Hrašovec 1998; Lombardero 1995:

362,365; Mattson et al. 1994:12; Osborne 1997; Öymen 1992; Perny 1998; Podlussány 1998:304; Riba 1996; Scortichini 1998; Shore & McLean 1995; Smith 1998:67; Telnov et al. 1997:135; Voolma 1996:145; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:36, 2000:65; Yanovskii 1999:350. **(ec)** Bakke 1996; Haase, Topp, & Zach 1998; Hedqvist 1998:79; Keimer 1990; Lombardero & Fernández de Ana Magán 1997: 182; Scortichini 1998; Tiberi & Ragazzi 1998; Wermlinger et al. 1999; Yang 1996. **(hb)** Gutowski & Kubisz 1995; Haase, Topp, & Zach 1998; Lagowska & Winierska 1997; Lombardero 1996:180; Lombardero & Fernández de Ana Magán 1997:182; Markalas & Kalapanida 1997; Skiba & Parii 1989. **(tx)** Lombardero 1996:180; Voolma, Õunap, & Süda 1997b: 36; Yanovskii 1999:350.

aequalis (Reitter). Add:
SYNONYMY: Mandelshtam 2001a:203.
REFERENCES: **(ds)** Krivolutskaya 1996a:360; Kulinich & Orlinskii 1998. **(tx)** Krivolutskaya 1996a:360; Mandelshtam 2001a:203.

Page 730 ***dolosus*** Blandford. Add:
REFERENCES: **(ds)** Bright 2000:68.

Page 730 ***dryographus*** (Ratzeburg). Add:
FIGURES: Dajoz 1998:412 (habitus); Lombardero 1996:182 (gallery pattern).
DISTRIBUTION: EUROPE: Italy.
REFERENCES: **(bv)** Hrašovec 1998. **(cn)** Madoffe & Bakke 1996. **(ds)** Bordoni 1995:43; Hastings 1998; Hrašovec 1998; Lombardero 1995:363; Öymen 1992; Ponel 1995; Riba 1996. **(hb)** Lombardero 1996:183; Madoffe & Bakke 1996; Markalas & Kalapanida 1997. **(tx)** Lombardero 1996:183.

Page 733 ***elongatus*** Eggers. Add:
HOSTS: *Cedrela mexicana*, *Khaya nyasica*, *Milicia excelsa*.
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(hb)** Madoffe & Bakke 1995.

Page 733 ***emarginatus*** Eichhoff. Add:
FIGURES: Anonymous 1992a:636 (habitus); Chey 1996:48 (adult).
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Trang).
REFERENCES: **(cn)** Chey 1996:48. **(ds)** Anonymous 1992a:636; Beaver 1999d:181; Bright 2000:69; Maetô, Fukuyama, & Kirton 1999. **(tx)** Anonymous 1992a:636; Węgrzynowicz & Mokrzycki 1996:59.

Page 733 ***eurygraphus*** (Ratzeburg). Add:
FIGURES: Lombardero 1996:181 (aedeagus), 182 (gallery pattern).
REFERENCES: **(bv)** Markalas 1997. **(ds)** Hastings 1998; Kulinich & Orlinskii 1998; Lombardero 1995:359,360; Markalas 1997:59; Öymen 1992; Riba 1996. **(hb)** Lombardero 1996:184. **(tx)** Lombardero 1996:184.

Page 735 ***fallax*** Eichhoff. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Trang).

REFERENCES: **(ds)** Beaver 1999d:182; Bright 2000:69. **(tx)** Węgrzynowicz & Mokrzycki 1996:59.

Page 735 *amphicranulus* Eggers (synonym of ***fallax*** Eichhoff). Add:
REFERENCES: **(ds)** Maetô, Fukuyama, & Kirton 1999.

Page 735 ***ferox*** Blandford. Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64.

Page 735 ***ferrugineus*** (Fabricius). Add:
FIGURES: Cibrián et al. 1995:377 (adults).
DISTRIBUTION: NORTH AMERICA (Cuba, Dominica, Guatemala, Panama). SOUTH AMERICA: Bolivia (El Beni); Brazil (Paraná, Paranaqua); Ecuador (Baltra, Floreana, Isabela, Marchena, Pinta, San Cristobal, Santa Cruz, Santiago, Seymour in Galápagos Islands), **Tobago** (see Appendix).
HOSTS: Many listed in Cibrián et al. 1995:376; *Araucaria angustifolia*, *Coffea* sp., *Eucalyptus tereticornis*, *Euterpe edulis*, *E. oleracea*.
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Dalusky, & Berisford 1999; Flechtmann, Ottati, & Berisford 1999. **(cn)** Cibrián et al. 1995:376; Flechtmann & Gaspareto 1997b:64; Morales et al. 1999; Sousa et al. 1997; Zorzenon & Bergmann 1995. **(ds)** Abreu, Fonseca, & Marques 1997; Borges 1990:203; Bright & Peck 1998: 241,249; Cibrián et al. 1995:376; Cognato & Bright 1996:72; Flechtmann & Ottati 1996; Iturre & Darchuck 1996; Mezzomo et al. 1998:84; Peck & Thomas 1998:159; Shore & McLean 1995; Vázquez, Tur, & Monteagudo 1996; Waterhouse 1997:45,50; Zorzenon & Bergmann 1995. **(ec)** Quicke & Marsh 1992. **(hb)** Cibrián et al. 1995:376; Morales et al. 1999. **(hb)** Dall'Oglio & Filho 1997.

Page 737 *fuscatus* Eichhoff (synonym of ***ferrugineus*** (Fabricius)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 738 *confusus* Eichhoff (synonym of ***ferrugineus*** (Fabricius)). Add:
REFERENCES: **(ds)** Paulin 1998:181.

Page 738 *impressus* Eichhoff (synonym of ***ferrugineus*** (Fabricius)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 739 *rufopiceus* Eggers (synonym of ***ferrugineus*** (Fabricius)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 740 *formosanus* Browne (synonym of ***formosae*** Wood). Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:60.

Page 741 ***glabratulus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:61.

Page 741 ***glabratus*** Eichhoff. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 741 ***granurus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:61.

Page 742 ***hashimotoi*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:63.

Page 742 ***hatanakai*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:62.

Page 742 ***hopeae*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:64.

Page 743 ***hunanensis*** Browne. Add:
FIGURES: Anonymous 1992a:637 (declivity).
REFERENCES: (**ds**) Anonymous 1992a:637. (**tx**) Anonymous 1992a: 637.

Page 744 ***improcerus*** (Sampson). Move to **Xylosandrus**.

Page 744 ***indonesianus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:64.

Page 744 ***insignis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:65.

Page 745 ***intrusus*** Blandford. Add:
HOSTS: *Pinus oocarpa*.
REFERENCES: (**cn**) Haack & Paiz-Schwartz 1997:73. (**ds**) Haack & Paiz-Schwartz 1997:73. (**hb**) Haack & Paiz-Schwartz 1997:73.

Page 746 ***katangensis*** Eggers. Move to **Ambrosiodmus**.

Page 746 ***katoi*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:66.

Page 747 ***kersianus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:66.

Page 747 ***lativentris*** Schedl. Add:
REFERENCES: (**tx**) Beaver 1998c:188.

Page 748 ***leverensis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:67.

Page 748 ***longipilus*** Eggers. Add:
REFERENCES: (**ds**) Yanovskii 1999:351. (**tx**) Yanovskii 1999:351.

Page 748 ***luteus*** Schedl. Move to **Ambrosiodmus**.

Page 749 ***maiche*** Stark. Add:
REFERENCES: (**ds**) Krivolutskaya 1996a:360; Yanovskii 1999:351. (**tx**) Krivolutskaya 1996a:360; Yanovskii 1999:351.

Page 749 ***malayensis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:68.

Page 750 **maniensis** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:68.

Page 750 *onerosus* Schedl (synonym of **mascareniformis** Eggers). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 750 **meuseli** Reitter. Move to **Monarthrum**. Add:
REFERENCES: **(ds)** Yanovskii 1999:351. **(tx)** Mandelshtam 2001a:203; Yanovskii 1999:351.

Page 751 **moluccanus** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:69.

Page 751 **monographus** (Fabricius). Add:
FIGURES: Lombardero 1996:179 (elytral declivity), 182 (gallery pattern); Voolma, Õunap, & Süda 1997b:36 (declivity, ♀ habitus).
DISTRIBUTION: EUROPE: Estonia, Italy, Latvia, Slovakia.
REFERENCES: **(ds)** Bordoni 1995:43; Hansen, M. 1996:212; Hastings 1998; Holecovà & Zach 1998; Hrašovec 1998; Lombardero 1995:363, 364; Riba 1996; Telnov et al. 1997:135; Voolma 1996:146; Voolma, Õunap, & Süda 1997b:36, 2000:66. **(ec)** Babuder & Pohleven 1995b; Frigimelica, Faccoli, & Salesses 1999; Hedqvist 1998:79. **(hb)** Lombardero 1996:185; Markalas & Kalapanida 1997. **(tx)** Lombardero 1996: 185; Voolma, Õunap, & Süda 1997b:36.

Page 753 **multipunctatus** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:70.

Page 754 **myllus** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:71.

Page 754 **nakazawai** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:72.

Page 755 **neivai** Eggers. Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Viana 1964:124).
HOSTS: *Araucaria angustifolia. Enterolobium contortisiliquum* (Viana 1964:124).
REFERENCES: **(ds)** Borges 1990:203.

Page 755 **neocylindricus** Schedl. Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 755 **nigrescens** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:73.

Page 756 **obesus** LeConte. Add:
REFERENCES: **(ds)** Shore & McLean 1995.

Page 756 **obiensis** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:73.

Page 757 ***octiesdentatus*** Murayama. Add:
REFERENCES: **(ds)** Yanovskii 1999:351. **(tx)** Yanovskii 1999:351.

Page 757 ***ohnoi*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:74.

Page 757 ***onoharaensis*** Murayama. Move to **Dryoxylon**.

Page 757 ***orientalis*** Eggers. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:360; Yanovskii 1999:351. **(tx)** Krivolutskaya 1996a:360; Yanovskii 1999:351.

Page 758 ***pelliculosus*** Eichhoff. Add:
REFERENCES: **(ds)** Mattson et al. 1994:14.

Page 759 ***perforans*** (Wollaston). Add:
FIGURES: Chey 1996:49 (adult).
DISTRIBUTION: ASIA: Malaysia (Sabah, Sarawak). NORTH AMERICA: Canada (British Columbia, introduction).
HOSTS: *Acacia mangium*.
NOTES: This species is almost certainly a synonym of *Xyleborus volvulus* (Fab.).
REFERENCES: **(cn)** Braza 1995; Chey 1996:49. **(ds)** Anonymous 1996: 34; Braza 1995; Bright 2000:70; Ho & Maznah 1995; Krishnasamy et al. 1991; Waterhouse 1997:45,50,53. **(ec)** LaSalle 1995.

Page 761 *kraatzi* Eichhoff (synonym of ***perforans*** (Wollaston)). Add:
REFERENCES: **(ds)** Paulin 1998:181.

Page 762 ***pfeili*** (Ratzeburg): Add:
DISTRIBUTION: NORTH AMERICA: United States (Maryland, **Oregon** (see Appendix)).
NOTES: We suspect that this species is a probable synonym of *Xyleborus volvulus* (Fabricius).
REFERENCES: **(an)** Mizuno, Fujiwara, & Matsuda 1997. **(cn)** Mizobuchi et al. 1996; Oogita et al. 1997, 1998; Soma et al. 1997, 1998. **(ds)** Öymen 1992; Podlussány 1998:304; Riba 1996; Vandenberg, Rabaglia, & Bright 2000. **(hb)** Lombardero 1996:187. **(tx)** Lombardero 1996:186.

Page 763 *adumbratus* Blandford (synonym of ***pfeili*** (Ratzeburg)). Add:
FIGURES: Anonymous 1992a:636 (habitus).
REFERENCES: **(ds)** Anonymous 1992a:636. **(tx)** Anonymous 1992a: 636.

Page 764 ***pinguis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:75.

Page 764 ***pinivorus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:75.

Page 764 ***planicollis*** Zimmermann. Add:
DISTRIBUTION: NORTH AMERICA: United States (Arkansas).
REFERENCES: **(ds)** Chapin & Oliver 1986.

Page 764 ***posticus*** Eichhoff. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (**Campeche, San Luis Potosí, Tamaulipas**) (see Appendix).

Page 766 ***pseudopilifer*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:72.

Page 766 ***pubescens*** Zimmermann. Add:
REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(ds)** Peck & Thomas 1998:160; Shore & McLean 1995.

Page 767 ***punctulatus*** Kurenzov. Move to ***bodoanus*** Reitter as a synonym. Add:
SYNONYMY: Mandelshtam 2001a:203.
REFERENCES: **(ds)** Krivolutskaya 1996a:361; Yanovskii 1999:351. **(tx)** Krivolutskaya 1996a:361; Yanovskii 1999:351.

Page 767 ***putputensis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:76.

Page 768 ***repositus*** Schedl. Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 768 ***robustipennis*** Schedl. Add:
REFERENCES: **(ds)** Bright 2000:72.

Page 769 ***rugosipennis*** Schedl. Add:
DISTRIBUTION: SOUTH AMERICA: **Trinidad** (see Appendix).
NOTES: This species is probably a synonym of *Xyleborus geayi* (Hagedorn).

Page 769 ***sayi*** (Hopkins). Add:
HOSTS: *Juglans cinerea*.
REFERENCES: **(ds)** Katovich & Ostry 1998:102; Shore & McLean 1995.

Page 771 ***semipunctatus*** Eggers. Add:
DISTRIBUTION: SOUTH AMERICA: **Peru** (see Appendix).

Page 771 ***semistriatus*** Schedl. Move to **Coptodryas**.

Page 772 ***similis*** Ferrari. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(ds)** Bright 2000:72. **(ec)** Balasundaran & Sankaran 1991. **(hb)** Madoffe & Bakke 1995.

Page 775 ***spicatulus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:77.

Page 775 ***spicatus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:77.

Page 775 ***spinatus*** Eggers. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:73.

Page 775 ***spinulosus*** Blandford. Add:
DISTRIBUTION: SOUTH AMERICA: Ecuador (Floreana, Isabela, Pinta, San Cristobal, Santa Cruz, Santiago in Galápagos Islands), **Peru** (see Appendix).
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64; Morales et al. 1999. **(ds)** Bright & Peck 1998:242,249; Flechtmann & Ottati 1996; Mezzomo et al. 1998:84. **(hb)** Dall'Oglio & Filho 1997; Morales et al. 1999.

Page 775 ***squamulatus*** Eichhoff. Add:
HOSTS: *Araucaria angustifolia*.
REFERENCES: **(cn)** Morales et al. 1999. **(ds)** Borges 1990:203. **(hb)** Morales et al. 1999.

Page 776 *squamulatus niger* Nunberg (synonym of ***squamulatus*** Eichhoff). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 776 ***starki*** Nunberg. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:361. **(tx)** Krivolutskaya 1996a:361.

Page 776 *quercus* Kurenzov (synonym of ***starki*** Nunberg). Add:
REFERENCES: **(ds)** Yanovskii 1999:351. **(tx)** Yanovskii 1999:351.

Page 776 ***striatulus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:78.

Page 776 ***subdentatulus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:78.

Page 777 ***subemarginatus*** Eggers. Move to **Euwallacea**.

Page 777 ***subdolosus*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:73.

Page 777 ***subpruinosus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:79.

Page 778 ***taiwanensis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:80.

Page 778 ***takeharai*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:81.

Page 778 ***teminabani*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:81.

Page 778 *montanus* Schedl (synonym of ***tenellus*** Schedl). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 779 ***titubanter*** Schedl. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (**Veracruz**) (see Appendix).

Page 779 ***trispinatus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:82.

Page 779 ***tuberculosus*** Browne. Add:
REFERENCES: **(ds)** Maetô, Fukuyama, & Kirton 1999. **(tx)** Kikata, Hijii, & Kajimura 1994:83.

Page 780 ***viduus*** Eichhoff. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 780 ***viruensis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:84.

Page 780 ***volvulus*** (Fabricius). Add:
FIGURES: Cibrián et al. 1995:375 (adults).
DISTRIBUTION: NORTH AMERICA: Mexico (Campeche, Distrito Federal, Veracruz); Panama. OCEANIA: **Pitcairn Islands (Henderson Is.)** (see Appendix). SOUTH AMERICA: Ecuador (San Cristobal, Santiago in Galápagos Islands), **Tobago** (see Appendix).
HOSTS: *Araucaria angustifolia*. Many additional hosts are listed in Cibrián et al. 1995:374.
REFERENCES: **(cn)** Cibrián et al. 1995:374; Tkacz et al. 1998:18,47. **(ds)** Abreu, Fonseca, & Marques 1997; Borges 1990:203; Bright & Peck 1998:242,249; Cibrián et al. 1995:374; Maetô, Fukuyama, & Kirton 1999; Peck & Thomas 1998:160; Tkacz et al. 1998:18,47; Waterhouse 1997:45,50. **(hb)** Cibrián et al. 1995:374; Tkacz et al. 1998:18,47.

Page 782 *badius* Eichhoff (synonym of ***volvulus*** (Fabricius)). Add:
REFERENCES: **(ds)** Yanovskii 1999:350. **(tx)** Węgrzynowicz & Mokrzycki 1996:59; Yanovskii 1999:350.

Page 783 ***xylographus*** (Say). Add:
DISTRIBUTION: ASIA: Turkey.
REFERENCES: **(ds)** Öymen 1992; Peck & Thomas 1998:160; Shore & McLean 1995.

Add species: ***inurbanus*** (Broun). From **Mesoscolytus**. Add:
REFERENCES: **(tx)** Beaver 1998c:181.

Genus **Taurodemus** Wood

Page 785 ***perebeae*** (Ferrari).
Delete "Mexico (Oaxaca)" from Distribution in 1997 supplement (page 167).

Genus **Xylosandrus** Reitter

Page 787 **Xylosandrus** Reitter. Add:
REFERENCES: **(ec)** Nakashima 1999. **(tx)** Krivolutskaya 1996a:359.

Page 787 ***brevis*** (Eichhoff). Add:

REFERENCES: **(cn)** Soma et al. 1997. **(ds)** Yanovskii 1999:350. **(ec)** Kinuura 1995; Kajimura 1998. **(tx)** Yanovskii 1999:350.

Page 788 ***compactus*** (Eichhoff). Add:

FIGURES: Anonymous 1992a:636 (habitus).

DISTRIBUTION: ASIA: Malaysia (Sabah). NORTH AMERICA: Cuba.

HOSTS: *Acacia mangium*, *Coffea* sp.

REFERENCES: **(bv)** Bright 1997b; Vázquez & Martínez 1999. **(cn)** Bright 1997b; CAB 1997:map 244; Holuša & Knížek 1999; Intachat & Kirton 1997; Vázquez & Martínez 1999. **(ds)** Abreu, Fonseca, & Marques 1997; Anonymous 1992a:636; Bright 1997b; CAB 1997:map 244; Ho & Maznah 1995; Jordal & Kirkendall 1998; Maetô, Fukuyama, & Kirton 1999; Mattson et al. 1994:14; Peck & Thomas 1998:160; Vázquez, Tur, & Monteagudo 1996; Waterhouse 1997:45,50. **(ec)** Bright 1997b; Vázquez & Martínez 1999. **(hb)** Bright 1997b; Pea, Baranowski, & Nadel 1996; Vázquez & Martínez 1999. **(tx)** Anonymous 1992a:636.

Page 790 ***crassiusculus*** (Motschulsky). Add:

FIGURES: Chey 1996:50 (adult, larva, pupa, damage).

DISTRIBUTION: ASIA: Malaysia (Sabah, Sarawak). NORTH AMERICA: United States (Florida, Louisana, **Tennessee** (see Appendix)).

HOSTS: *Acacia mangium*, *Elaeis guineensis* (leafstalks), *Mansonia altissima*.

REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(cn)** Braza 1995; Chey 1996:50; Foahom 1996. **(ds)** Anonymous 1992a:637; Braza 1995; Bright 2000:74; Chapin & Oliver 1986; Ho & Maznah 1995; Jordal & Kirkendall 1998; Maetô, Fukuyama, & Kirton 1999; Mattson et al. 1994:14; Peck & Thomas 1998:160. **(ec)** Kajimura 1998; Kinuura 1995; Maeto, Fukuyama, & Kirton 1999. **(hb)** Maetô, Fukuyama, & Kirton 1999. **(tx)** Anonymous 1992a:637.

Page 792 *ebriosus* Niisima (synonym of ***crassiusculus*** (Motschulsky)). Add:

REFERENCES: **(ds)** Yanovskii 1999:351. **(tx)** Yanovskii 1999:351.

Page 793 ***curtulus*** (Eichhoff). Add:

HOSTS: *Cedrela odorata*.

REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Flechtmann & Ottati 1996.

Page 793 *biseriatus* Schedl (synonym of ***curtulus*** (Eichhoff)). Add:

REFERENCES: **(ds)** Garrido & Briceno 1997; Mezzomo et al. 1998:84. **(hb)** Dall'Oglio & Filho 1997.

Page 794 ***difficilis*** (Eggers). Add:

DISTRIBUTION: ASIA: Malaysia (Sarawak).

REFERENCES: **(ds)** Bright 2000:75.

Page 795 ***germanus*** (Blandford). Add:

FIGURES: Anonymous 1992a:636 (habitus).

DISTRIBUTION: EUROPE: Belgium, Italy. NORTH AMERICA: Canada (Quebec), United States (Florida).

REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(cn)** Cech & Krehan 1997; Graf & Manser 1996; Kleinevoss, Topp, & Bohac 1996; Mizobuchi et al. 1996; Oogita et al. 1998; Soma et al. 1997; Stergulc et al. 1999; Wermlinger et al. 1999. **(ds)** Anonymous 1992a:636, 1995:41, 1996:34; Bruge 1995; Hastings 1998; Holzschuh 1995:137; Krivolutskaya 1996a:359; Mattson et al. 1994:14; Peck & Thomas 1998:160; Stergulc et al. 1999; Yanovskii 1999:351; Zandigiacomo et al. 1998. **(ec)** Frigimelica et al. 1999; Haase, Topp, & Zach 1998; Kajimura 1998; Stergule et al. 1999; Wermlinger et al. 1999. **(hb)** Haase, Topp, & Zach 1998. **(tx)** Anonymous 1992a:636; Krivolutskaya 1996a:359; Yanovskii 1999:351.

Page 797 ***morigerus*** (Blandford). Add:

FIGURES: Cibrián et al. 1995:379 (adults).

DISTRIBUTION: ASIA: Malaysia (Sarawak). NORTH AMERICA: Mexico (Campeche, Tabasco).

HOSTS: Many listed in Cibrián et al. 1995:378.

REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(cn)** Cibrián et al. 1995:378. **(ds)** Bright 2000:75; Bright & Peck 1998:240,249; Cibrián et al. 1995:378, 1998; Jordal & Kirkendall 1998; Maetô, Fukuyama, & Kirton 1999; Waterhouse 1997:45,50. **(hb)** Cibrián et al. 1995:378; Jordal & Kirkendall 1998.

Page 799 ***mutilatus*** (Blandford). Add:

REFERENCES: **(ds)** Yanovskii 1999:351. **(ec)** Kajimura 1998. **(tx)** Yanovskii 1999:351.

Page 800 ***retusus*** (Eichhoff). Add:

REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64; Morales et al. 1999. **(ds)** Flechtmann & Ottati 1996; Mezzomo et al. 1998:84. **(hb)** Dall'Oglio & Filho 1997; Morales et al. 1999.

Page 801 ***ursa*** (Eggers). Add:

DISTRIBUTION: ASIA: Malaysia (Sarawak).

REFERENCES: **(ds)** Bright 2000:76.

Page 801 ***ursinus*** (Hagedorn). Add:

DISTRIBUTION: ASIA: Indonesia (Sulawesi) (see Appendix).

Page 801 ***ursulus*** (Eggers). Add:

DISTRIBUTION: ASIA: Malaysia (Sarawak).

REFERENCES: **(ds)** Bright 2000:76.

Page 801 ***zimmermanni*** (Hopkins). Add:

REFERENCES: **(ds)** Peck & Thomas 1998:160.

Add species: ***improcerus*** (Sampson). From **Xyleborus**. Add:

REFERENCES: **(tx)** Beaver 1998c:183.

Genus **Cnestus** Sampson

Page 802 ***maculatus*** Browne. Add:
FIGURES: Anonymous 1992a:639 (habitus).
REFERENCES: **(ds)** Anonymous 1992a:639. **(tx)** Anonymous 1992a: 639.

Page 803 ***pseudopunctulus*** (Schedl). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Genus **Xyleborinus** Reitter

Page 804 ***alni*** (Niisima). Add:
FIGURES: Holzschuh 1990a (habitus).
DISTRIBUTION: NORTH AMERICA: United States Washington (introduced).
REFERENCES: **(bv)** Holzschuh 1990a. **(cn)** Cech & Krehan 1997. **(ds)** Anonymous 1996:34; Holzschuh 1995:137; Krivolutskaya 1996a:361; LaGasa, Furniss, & Kamping 1997:4; Yanovskii 1999:350. **(tx)** Bense & Schott 1998:327; Krivolutskaya 1996a:361; Yanovskii 1999:350.

Page 804 ***andrewesi*** (Blandford). Add:
Distribution: NORTH AMERICA: **Cuba** (see Appendix).
REFERENCES: **(ds)** Maetô, Fukuyama, & Kirton 1999.

Page 805 ***artestriatus*** (Eichhoff). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Trang).
REFERENCES: **(ds)** Beaver 1999d:181; Bright 2000:66.

Page 805 ***attenuatus*** (Blandford). Add:
REFERENCES: **(ds)** Yanovskii 1999:350. **(tx)** Yanovskii 1999:350.

Page 805 *laticollis* Blandford (synonym of ***artestriatus*** (Eichhoff)). Add:
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 806 ***exiguus*** (Walker). Add:
DISTRIBUTION: ASIA: Malaysia (Sabah, Sarawak).
HOSTS: *Acacia mangium*.
REFERENCES: **(ds)** Bright 2000:66; Ho & Maznah 1995; Maetô, Fukuyama, & Kirton 1999.

Page 808 ***gracilis*** (Eichhoff). Add:
DISTRIBUTION: NORTH AMERICA: Mexico (**Chiapas**) (see Appendix). SOUTH AMERICA: **Ecuador** (see Appendix). Delete "Galapagos Islands" from Distribution in 1992 catalog.
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Dalusky, & Berisford 1999; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Abreu, Fonseca, & Marques 1997; Bright & Peck 1998:240; Flechtmann & Ottati 1996; Mezzomo et al. 1998:84; Peck & Thomas 1998:159.

Page 808 *aspericauda* Eggers (synonym of ***gracilis*** (Eichhoff)). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:159.

Page 808 ***linearicollis*** (Schedl). Add:
HOSTS: *Araucaria angustifolia*. *Populus angulata* (Viana 1964:124).
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Borges 1990:203.

Page 810 ***pometianus*** (Schedl). Move to **Coptodryas**.

Page 810 ***saxeseni*** (Ratzeburg). Add:
FIGURES: Anonymous 1992a:635 (habitus); Lombardero 1996:181 (aedeagus), 182 (gallery pattern); Lombardero & Fernández de Ana Magán 1997:179 (adult).
DISTRIBUTION: ASIA: China (Hunan). SOUTH AMERICA: Ecuador (Isabela, Santa Cruz, Santiago in Galápagos Islands).
HOSTS: *Eucalyptus* sp.
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Dalusky, & Berisford 1999; Lombardero & Fernández de Ana Magán 1997:179. **(cn)** Flechtmann & Gaspareto 1997b:64; Scortichini 1998. **(ds)** Anonymous 1992a:635; Bright & Peck 1998:240,249; Dinnin 1997; Gutowski & Kubisz 1995; Hansen, M. 1996:212; Hansen, M. et al. 1997: 92; Hastings 1998; Krivolutskaya 1996a:361; Lombardero 1995: 361–365; Mattson et al. 1994:12; Öymen 1992; Peck & Thomas 1998: 159; Ponel 1995; Riba 1996; Shore & McLean 1995; Yanovskii 1999: 351. **(ec)** Haase, Topp, & Zach 1998; Hedqvist 1998:79; Lombardero & Fernández de Ana Magán 1997:179; Scortichini 1998. **(hb)** Gutowski & Kubisz 1995; Haase, Topp, & Zach 1998; Lombardero 1996:187; Lombardero & Fernández de Ana Magán 1997:179; Markalas & Kalapanida 1997; Simon 1995. **(tx)** Anonymous 1992a:635; Krivolutskaya 1996a: 361; Lombardero 1996:187; Yanovskii 1999:351.

Page 814 *dohrni* Wollaston (synonym of ***saxeseni*** (Ratzeburg)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:59.

Page 814 *retrusus* Schedl (synonym of ***saxeseni*** (Ratzeburg)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 815 *peregrinus* Eggers (synonym of ***saxeseni*** (Ratzeburg)). Add:
FIGURES: Bense & Schott 1998: 327 (♂ habitus).
REFERENCES: **(tx)** Bense & Schott 1998:326.

Page 815 *paraguayensis* Schedl (synonym of ***saxeseni*** (Ratzeburg)). Add:
REFERENCES: **(cn)** Morales et al. 1999. **(ds)** Iturre & Darchuck 1996. **(hb)** Morales et al. 1999.

Page 816 ***sentosus*** (Eichhoff). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1960:285).

REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Borges 1990:203. **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Genus **Mesoscolytus** Broun

Page 818 *Mesoscolytus* Broun. Move to **Xyleborus** as a synonym. Add:
SYNONYMY: Beaver 1998c:181.

Page 818 ***inurbanus*** (Broun). Move to **Xyleborus**. Add:
REFERENCES: **(tx)** Beaver 1998c:181.

Genus **Hadrodemius** Wood

Page 818 ***amorphus*** (Eggers). Add:
FIGURES: Anonymous 1992a:638 (habitus).
REFERENCES: **(ds)** Anonymous 1992a:638. **(tx)** Anonymous 1992a: 638.

Page 818 ***artecomans*** (Schedl). Add:
FIGURES: Anonymous 1992a:639 (habitus).
REFERENCES: **(ds)** Anonymous 1992a:638. **(tx)** Anonymous 1992a: 638.

Page 819 ***globus*** (Blandford). Add:
FIGURES: Chey 1996:44 (adult, larva, pupa, damage).
REFERENCES: **(cn)** Chey 1996:45. **(ds)** Maetô, Fukuyama, & Kirton 1999.

Genus **Eccoptoperus** Motschulsky

Page 819 **Eccoptopterus** Motschulsky. Add:
REFERENCES: **(cn)** Chey 1996:46.

Page 820 ***limbus*** Sampson. Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64.

Page 822 ***spinosus*** (Olivier). Add:
HOSTS: *Khaya nyasica*, *Milicia excelsa*.
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(cn)** Madoffe & Bakke 1995, 1996. **(hb)** Madoffe & Bakke 1995, 1996.

Page 822 ***tarsalis*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:65.

Genus **Schedlia** Browne

Page 822 ***sumatrana*** (Hagedorn). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:64.

Genus **Coptodryas** Hopkins

Page 823 *cryphaloides* Schedl (synonym of ***confusa*** Hopkins). Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: **(tx)** Beaver 1998c:188.

Page 824 ***huangi*** (Browne). Add:
FIGURES: Anonymous 1992a:636 (habitus).
REFERENCES: **(ds)** Anonymous 1992a:636. **(tx)** Anonymous 1992a:636.

Page 825 ***intermedius*** (Eggers). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:76.

Page 826 ***nugax*** (Schedl). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak), Thailand (Trang).
REFERENCES: **(ds)** Bright 2000:76.

Page 826 *fragosus* Schedl (listed as synonym of ***nugax*** (Schedl)), remove from synonymy. Add:
NOTES: Beaver 1999d:179 considers this to be a distinct species.
REFERENCES: **(ds)** Beaver 1999d:179.

Page 826 ***perparva*** (Sampson). Add:
FIGURES: Anonymous 1992a:639 (habitus).
HOSTS: *Acacia mangium*.
REFERENCES: **(ds)** Anonymous 1992a:639; Ho & Maznah 1995. **(tx)** Anonymous 1992a:639.

Page 827 ***recidens*** (Sampson). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:78.

Add species: ***compta*** (Sampson). From **Euwallacea**. Add:
REFERENCES: **(tx)** Beaver 1998c:183.

destricta (Schedl). From **Cyclorhipidion**. Add:
REFERENCES: **(tx)** Beaver 1998c:183.

fragosus Schedl (listed as synonym of ***nugax*** (Schedl)), remove from synonymy. Add:
NOTES: Beaver 1999d:179 considers this to be a distinct species.
REFERENCES: **(ds)** Beaver 1999d:179.

pometiana (Schedl). From **Xyleborinus**. Add:
REFERENCES: **(tx)** Beaver 1998c:183.

semistriata (Schedl). From **Xyleborus**. Add:
REFERENCES: **(tx)** Beaver 1998c:183.

Genus **Taphrodasus** Wood

Page 828 ***penicillatus*** (Hagedorn). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**ds**) Bright 2000:66.

Genus **Cryptoxyleborus** Schedl

Page 828 ***major*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:26.

Page 828 ***naevus*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sumatra).
REFERENCES: (**ds**) Bright 2000:65.

Page 829 ***shoreae*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:27.

Page 829 ***subnaevus*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sumatra).
REFERENCES: (**ds**) Bright 2000:65.

Genus **Webbia** Hopkins

Page 829 ***bakoensis*** Browne. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:59.

Page 830 ***dasyurus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:46.

Page 830 ***denticulatus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:47.

Page 831 ***hatanakai*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:48.

Page 831 *decorus* Schedl (unnecessary replacement name for ***micrographus*** (Schedl)). Add:
NOTES: Delete this entry. *X. decorus* is correctly listed under *Xyleborinus micrographus* (Page 809).

Page 831 ***multidentatus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:48.

Page 832 ***platypoides*** Eggers. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:59.

Page 832 ***similis*** (Eggers).
Delete "Indonesia (Kalimantan)" from Distribution in 1997 supplement (page 177).

Page 833 ***trepanicauda*** (Eggers). Add:
DISTRIBUTION: ASIA: Thailand (Trang).
REFERENCES: **(ds)** Beaver 1999d:181.

Page 833 ***triginitispinatus*** Sampson.
Delete "Cambodia" from Distribution in Supplement 1 (page 177).

Add species: ***talauricus*** (Eggers) 1923:214 (**Arixyleborus**). **NEW COMBINATION**.

TRIBE XYLOCTONINI

Genus **Glostatus** Schedl

Page 836 ***vrydaghi*** (Nunberg). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Genus **Ctonoxylon** Hagedorn

Page 836 *atrum* Browne. Move to ***hamatum*** Schedl as a synonym. Add:
SYNONYMY: Schedl 1970:223.
NOTES: Synonymy omitted from 1992 catalog and 1997 supplement.

Page 838 ***hamatum*** Schedl. Add *atrum* Browne as a synonym. Add:
REFERENCES: **(tx)** Beaver 1998c:186; Schedl 1970:223.

Page 838 ***longipilum*** Eggers. Add *nodosum* Eggers as a synonym. Add:
REFERENCES: **(tx)** Beaver 1998c:186; Schedl 1972b:278.

Page 838 *nodosum* Eggers. Move to ***longipilum*** Eggers as a synonym. Add:
SYNONYMY: Schedl 1972b:278.
NOTES: Synonymy omitted from 1992 catalog and 1997 supplement.

Genus **Scolytomimus** Blandford

Page 839 ***pusillus*** (Eggers). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

TRIBE CRYPHALINI

Genus **Trypophloeus** Fairmaire

Page 842 **Trypophloeus** Fairmaire. Add:
KEYS: Krivolutskaya 1996a:368 (to East Russian species); Süda 1996: 152 (to Estonian species); Voolma, Õunap, & Süda 1997b:37 (to Estonian species).
REFERENCES: **(ds)** Lindelöw 1998b. **(tx)** Krivolutskaya 1996a:368; Süda 1996; Voolma, Õunap, & Süda 1997b:37.

Page 842 ***alni*** (Lindemann). Add:
DISTRIBUTION: EUROPE: Estonia.
REFERENCES: **(ds)** Süda 1996:150; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:37, 2000:66; Yanovskii 1999:352. **(tx)** Voolma, Õunap, & Süda 1997b:37; Yanovskii 1999:352.

Page 843 ***binodulus*** (Ratzeburg). Add *kurenzovi* Nunberg as a synonym. Add:
FIGURES: Krivolutskaya 1996a:313 (habitus), 334 (declivity).
REFERENCES: **(tx)** Krivolutskaya 1996a:369.
NOTES: Treated as *T. asperatus* by Krivolutskaya 1996a:369.

Page 844 *grothi* Hagedorn (synonym of ***binodulus*** (Ratzeburg)). Add:
REFERENCES: **(ds)** Hansen, M. 1996:211; Voolma, Õunap, & Süda 1997b:37. **(ec)** Hedqvist 1998:78. **(tx)** Voolma, Õunap, & Süda 1997b:37.

Page 844 *spiculatus* Eggers (synonym of ***binodulus*** (Ratzeburg)). Add:
REFERENCES: **(ds)** Lombardero 1995:362; Voolma, Õunap, & Süda 1997b:37. **(tx)** Voolma, Õunap, & Süda 1997b:37.

Page 844 ***dejevi*** Stark. Add:
FIGURES: Krivolutskaya 1996a:334 (antenna).
REFERENCES: **(ds)** Krivolutskaya 1996a:368. **(tx)** Krivolutskaya 1996a:368.

Page 844 ***granulatus*** (Ratzeburg). Add:
FIGURES: Krivolutskaya 1996a:313 (habitus).
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: **(ds)** Krivolutskaya 1996a:369; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:37; Yanovskii 1999:352. **(tx)** Krivolutskaya 1996a:369; Voolma, Õunap, & Süda 1997b:37; Yanovskii 1999:352.

Page 845 *bispinulus* Eggers (synonym of ***granulatus*** (Ratzeburg)). Add:
NOTES: Süda 1996:150 (treated as a good species).
REFERENCES: **(ds)** Süda 1996:150; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:37, 2000:67. **(ec)** Hedqvist 1998:78; Martikainen et al. 1999. **(tx)** Süda 1996:150; Voolma, Õunap, & Süda 1997b:37.

Page 845 *kurenzovi* Nunberg. Move to ***binodulus*** as a synonym. Add:
SYNONYMY: Krivolutskaya 1996a:369.
REFERENCES: **(ds)** Kulinich & Orlinskii 1998; Yanovskii 1999:352. **(tx)** Yanovskii 1999:352.

Page 846 *palmi* Hansen, V. Move to ***discedens*** Palm as a synonym. Add:
SYNONYMY: Süda 1996:151.

Page 846 ***populi*** Kurenzov. Add:
REFERENCES: **(ds)** Yanovskii 1999:352. **(tx)** Yanovskii 1999:352.

Page 846 ***rybinskii*** Reitter. Add:
DISTRIBUTION: EUROPE: Hungary.

REFERENCES: **(ds)** Podlussány 1998:304. **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Page 847 ***striatulus*** (Mannerheim). Add:
DISTRIBUTION: EUROPE: Hungary. NORTH AMERICA: United States (Washington).
REFERENCES: **(ds)** Furniss & Johnson 1995:339; Podlussány 1998. **(hb)** Furniss & Johnson 1995:339.

Add species: ***discedens*** Palm 1950:142. Syntypes (sex?); Sweden; not located.
DISTRIBUTION: EUROPE: Estonia, Finland, Sweden.
REFERENCES: **(ds)** Süda 1996:151; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1997a:21, 1997b:37, 2000:68. **(ec)** Hedqvist 1998:78. **(tx)** Süda 1996:151; Voolma, Õunap, & Süda 1997b:37.
NOTES: (1) Palm 1950 inadvertently validated *T. discedens* Eggers, previously a nomen nudum. (2) Probably synonym of *T. granulatus*.

palmi Hansen, V. (synonym of ***discedens*** Palm).

Genus **Procryphalus** Hopkins

Page 848 ***fraxini*** (Berger). Add:
FIGURES: Krivolutskaya 1996a:313 (habitus), 334 (antenna).
REFERENCES: **(ds)** Krivolutskaya 1996a: 366; Yanovskii 1999:353. **(tx)** Krivolutskaya 1996a:366; Yanovskii 1999:353.

Page 848 ***mucronatus*** (LeConte). Add:
DISTRIBUTION: NORTH AMERICA: Canada (**British Columbia**) (see Appendix); United States (Washington).
REFERENCES: **(ds)** Furniss & Johnson 1995:339. **(hb)** Furniss & Johnson 1995:339.

Page 848 ***utahensis*** Hopkins. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: **(ds)** Furniss & Johnson 1995:339. **(hb)** Furniss & Johnson 1995:339.

Genus **Ernoporicus** Berger

Page 848 **Ernoporicus** Berger. Add:
KEYS: Krivolutskaya 1996a:366 (to East Russian species).
REFERENCES: **(tx)** Krivolutskaya 1996a:366; Voolma, Õunap, & Süda 1997b:37.

Page 849 ***caucasicus*** (Lindemann). Add:
HOSTS: *Tilia caucasica*.
REFERENCES: **(ds)** Dinnin 1997; Hansen, M. 1996:211; Osborne 1996: 187; Öymen 1992; Riba 1996; Voolma, Õunap, & Süda 1997b:38. **(ec)** Khaustov 1998c. **(tx)** Voolma, Õunap, & Süda 1997b:38.

Page 850 ***fagi*** (Fabricius). Add:
DISTRIBUTION: EUROPE: Spain.
REFERENCES: **(cn)** Baganich 1997; Kleinevoss, Topp, & Bohac 1996; Wermlinger et al. 1999. **(ds)** Hansen, M. 1996:211. **(ec)** Hedqvist 1998: 78; Wermlinger et al. 1999.

Page 851 ***longus*** (Eggers). Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:366; Yanovskii 1999:353. **(tx)** Krivolutskaya 1996a:366; Yanovskii 1999:353.

Page 851 ***semenovi*** (Kurenzov). Add:
FIGURES: Krivolutskaya 1996a:334 (pronotum).
REFERENCES: **(ds)** Krivolutskaya 1996a:367; Yanovskii 1999:352. **(tx)** Krivolutskaya 1996a:367; Yanovskii 1999:352.

Page 851 ***spessivtzevi*** Berger. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:367; Yanovskii 1999:352. **(tx)** Krivolutskaya 1996a:367; Yanovskii 1999:352.

Page 852 ***zachvatkini*** (Krivolutskaya). Add:
FIGURES: Krivolutskaya 1996a:334 (pronotum).
REFERENCES: **(ds)** Krivolutskaya 1996a:367; Yanovskii 1999:352. **(tx)** Krivolutskaya 1996a:367; Yanovskii 1999:352.

Genus **Acorthylus** Brethes

Page 853 ***robustus*** (Schedl). Add:
HOSTS: *Geoffroea decorticans*, *Nectranda* sp. (Viana 1964:122).

Genus **Stephanopodius** Schedl

Page 853 ***squamosus*** Nunberg. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:58.

Genus **Allernoporus** Kurenzov

Page 852 **Allernoporus** Kurenzov. Add:
REFERENCES: **(tx)** Krivolutskaya 1996a:367.

Page 852 ***euonymi*** Kurenzov. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:368; Yanovskii 1999:353. **(tx)** Krivolutskaya 1996a:368; Yanovskii 1999:353.

Genus **Neocryphus** Nunberg

Page 852 ***argentinensis*** Nunberg. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

Genus **Ernoporus** Thomson

Page 854 **Ernoporus** Thomson. Add:
REFERENCES: **(tx)** Voolma, Õunap, & Süda 1997b:38.

Page 854 *Cryphalops* Reitter (synonym of **Ernoporus** Thomson). Add:
KEYS: Krivolutskaya 1996a:366 (to East Russian species).
REFERENCES: **(tx)** Krivolutakaya 1996a:366.

Page 854 ***armatus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:31.

Page 855 ***exiguus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:32.

Page 855 ***inermis*** (Schedl). Add:
HOSTS: *Rhizophora mucronata*.
REFERENCES: **(ds)** Veenakumari, Mohanraj, & Bandyopadhyay 1997. **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 855 ***tiliae*** (Panzer). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:38 (habitus, outline of pronotum).
DISTRIBUTION: EUROPE: Estonia, Latvia.
REFERENCES: **(ds)** Hansen, M. 1996:211; Marcu & Stoica 1996; Öymen 1992; Telnov et al. 1997:138; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:38, 2000:68; Yanovskii 1999:353. **(ec)** Hedqvist 1998: 78; Marcu & Stoica 1996. **(hb)** Marcu & Stoica 1996. **(tx)** Marcu & Stoica 1996; Voolma, Õunap, & Süda 1997b:38; Yanovskii 1999:353.

Page 857 ***eggersi*** Stark, author should be Kurenzov, 1941. Add:
FIGURES: Krivolutskaya 1996a:334 (pronotum).
NOTES: (1) Recognized as subspecies of ***tiliae*** by Krivolutskaya 1996a: 366. (2) *eggersi* Stark is a nomen numum, validated with same name by Kurenzov, 1941:155; also named *starki* by Eggers 1942:31 (synonym).
REFERENCES: **(tx)** Krivolutskaya 1996a:366.

Page 857 ***tuberculatus*** (Browne). Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:32.

Genus **Scolytogenes** Eichhoff

Page 858 **Scolytogenes** Eichhoff. Add:
KEYS: Yin 2001:322 (to Chinese species).
REFERENCES: **(tx)** Yin 2001.

Page 859 ***aspericollis*** (Eichhoff). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

Page 859 ***ater*** (Eggers). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

Page 860 ***darwini*** Eichhoff. Add:
FIGURES: Yin 2001:323 (antenna).
REFERENCES: (tx) Yin 2001:323.

Page 861 ***eggersi*** (Schedl). Add:
NOTES: (1) Distribution included Java, Malaya, and Vietnam. (2) See Beaver 1998c:186 for changes in references.
REFERENCES: (tx) Beaver 1998c:186.

Page 861 ***fijianus*** (Schedl). Add:
REFERENCES: (ds) Jordal & Kirkendall 1998.

Page 862 ***knabi*** (Hopkins). Add:
REFERENCES: (ds) Peck & Thomas 1998:160.

Page 865 ***quadridens*** (Browne). Add:
REFERENCES: (ds) Jordal & Kirkendall 1998.

Add species: ***exilis*** Yin 2001:327. Holotype (♀), P. R. China: Guangdong, Xuwen; IZAC.
FIGURES: Yin 2001:333 (habitus).
DISTRIBUTION: ASIA: China (Guangdong).
REFERENCES: (tx) Yin 2001:327.

glabratus Yin 2001:330. Holotype (♂), P. R. China: Yannan, Gongshan; IZAC.
FIGURES: Yin 2001:331 (head, antenna), 333 (habitus).
DISTRIBUTION: ASIA: China (Hubei, Yunnan).
HOSTS: *Alangium chinense, Firmiana simplex.*
REFERENCES: (tx) Yin 2001: 330.

incultus Yin 2001:325. Holotype (♂), P. R. China: Jiangsu, Nantong; IZAC.
FIGURES: Yin 2001:332 (habitus, antenna).
DISTRIBUTION: ASIA: China (Jiangsu).
HOSTS: *Pittosporum tobira.*
REFERENCES: (tx) Yin 2001:325.

magnocularis Yin 2001:326. Holotype (♂), P. R. China: Yunnan, Xishuangbannan; IZAC.
FIGURES: Yin 2001:332 (habitus).
DISTRIBUTION: ASIA: China (Yunnan).
HOSTS: *Cassia siamea.*
REFERENCES: (tx) Yin 2001:326.

polisquamosusYin 2001:329. Holotype (♀), P. R. China: Fujian, Jiangle; IZAC.
FIGURES: Yin 2001:329 (antenna), 333 (habitus).
DISTRIBUTION: ASIA: China (Fujian).
REFERENCES: (tx) Yin 2001:329.

venustus Yin 2001:328. Holotype (♀), P. R. China: Guangdong, Haikang; IZAC.
FIGURES: Yin 2001:333 (habitus).
DISTRIBUTION: ASIA: China (Guangdong).

HOSTS: under bark of tree.
REFERENCES: (**tx**) Yin 2001:328.

yunnanensis Yin 2001:324. Holotype (♂), P. R. China: Yunnan, Jinghong; IZAC.
FIGURES: Yin 2001:322 (habitus).
DISTRIBUTION: ASIA: China (Yunnan).
HOSTS: *Bauhinia variegata*, *Betula alnoides*.
REFERENCES: (**tx**) Yin 2001:324.

Genus **Eidophelus** Eichhoff

Page 867 ***borneensis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:30.

Page 867 ***gracilis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:30; Krivolutskaya 1996a:371.

Page 867 ***imitans*** Eichhoff. Add:
REFERENCES: (**ds**) Yanovskii 1999:353. (**tx**) Yanovskii 1999:353.

Page 867 *elegans* Krivolutskaya (synonym of ***imitans*** Eichhoff). Add:
FIGURES: Krivolutskaya 1996a:324 (habitus).
REFERENCES: (**ds**) Krivolutskaya 1996a:371. (**tx**) Krivolutskaya 1996a:371.

Genus **Hypocryphalus** Hopkins

Page 868 ***bidentatus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:33.

Page 869 ***fici*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:33.

Page 869 ***laevis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:34.

Page 869 ***longipilis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:35.

Page 869 ***malayensis*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**ds**) Bright 2000:79.

Page 869 ***mangiferae*** Schedl. Add:
DISTRIBUTION: NORTH AMERICA: Puerto Rico.

REFERENCES: **(ds)** Cabrera-Asencio 1996; Mattson et al. 1994:12; Peck & Thomas 1998:160. **(hb)** Peña, Baranowski, & Nadel 1996.

Page 869 ***minutus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:35.

Page 871 ***perminimus*** (Schedl). Add:
HOSTS: *Acacia mangium*.
REFERENCES: **(ds)** Ho & Maznah 1995.

Page 871 *froggatti* Nunberg (synonym of ***perminimus*** (Schedl)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:56.

Page 871 ***reflexus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:36.

Page 872 ***sandakanensis*** (Schedl). Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:79.

Genus **Cryphalus** Erichson

Page 872 **Cryphalus** Erichson. Add:
KEYS: Krivolutskaya 1996a:362 (to East Russian species); Voolma, Õunap, & Süda 1997b:38 (to Estonian species).
REFERENCES: **(ec)** Yu LiChen et al. 1996. **(tx)** Krivolutskaya 1996a: 362; Voolma, Õunap, & Süda 1997b:38.

Page 873 ***alni*** Krivolutskaya. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:363; Yanovskii 1999:354. **(tx)** Krivolutskaya 1996a:363; Yanovskii 1999:354.

Page 873 ***artocarpus*** (Schedl, 1939). Add *artocarpi* Schedl 1958 as a synonym. Add:
SYNONYMY: Schedl 1975:39.
NOTES: (1) Synonymy omitted from 1992 catalog and 1997 supplement. (2) *brownei* Wood is an unnecessary replacement name for *artocarpi* Schedl, 1958.

Page 874 ***asperatus*** (Gyllenhall). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:17 (antenna).
DISTRIBUTION: EUROPE: Estonia, Latvia.
NOTES: (1) Süda 1996:151 and Voolma, Õunap, & Süda 2000:67 (treated in *Trypophloeus*). (2) Süda 1999 (single reliable record from Estonia may be misidentified).
REFERENCES: **(cn)** Öymen 1992. **(ds)** Öymen 1992; Riba 1996; Süda 1996:151; Voolma, Õunap, & Süda 1997b:37, 2000:67; Yanovskii 1999: 352. **(ec)** Hedqvist 1998:78. **(tx)** Süda 1996:151, 1999; Voolma, Õunap, & Süda 1997b:37; Yanovskii 1999:352.

Page 874 *abietis* Ratzeburg (synonym of ***asperatus*** (Gyllenhal)). Add:
FIGURES: Dajoz 1998:412 (habitus); Voolma, Õunap, & Süda 1997b:38 (habitus).
REFERENCES: **(cn)** Mihalciuc 1997. **(ds)** Gutowski & Kubisz 1995; Hansen, M. 1996:212; Kulinich & Orlinskii 1998; Öymen 1992; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:38, 2000:69; Wermlinger et al. 1999; Yanovskii 1999:353. **(ec)** Hedqvist 1998:78; Kula & Ząbecki 1998; Wermlinger et al. 1999. **(hb)** Gutowski & Kubisz 1995. **(tx)** Voolma, Õunap, & Süda 1997b:38; Yanovskii 1999: 353.

Page 877 ***birosimensis*** (Murayama). Add:
REFERENCES: **(cn)** Oogita et al. 1998.

Page 877 *brownei* Wood. Move to ***artocarpus*** (Schedl) as an unnecessary replacement name.

Page 877 ***carpini*** Berger. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:365; Yanovskii 1999:354. **(tx)** Krivolutskaya 1996a:365; Yanovskii 1999:354.

Page 878 ***carpinivorus*** Murayama. Add:
REFERENCES: **(ds)** Yanovskii 1999:354. **(tx)** Yanovskii 1999:354.

Page 878 ***chinlingensis*** Tsai & Li. Add:
REFERENCES: **(ec)** Chen et al. 1999; Yang 1996. **(hb)** Chen et al. 1999.

Page 878 ***coryli*** Stark. Add:
REFERENCES: **(ds)** Yanovskii 1999:354. **(tx)** Yanovskii 1999:354.

Page 878 ***cylindricus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:21.

Page 879 *indicus* Eichhoff (synonym of ***dorsalis*** (Motschulsky)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Page 879 ***exiguus*** Blandford. Add:
DISTRIBUTION: ASIA: China (Beijing, Shaanxi).
HOSTS: *Morus alba*.
REFERENCES: **(ds)** Yanovskii 1999:354. **(ec)** Yang 1996. **(ds)** Yanovskii 1999:354.

Page 880 ***fulvus*** Niisima. Add:
REFERENCES: **(cn)** Oogita et al. 1997, 1998; Soma et al. 1997, 1998. **(ds)** Krivolutskaya 1996a:365; Yanovskii 1999:354. **(ec)** Kinuura et al. 1999. **(ms)** Soma et al. 1996. **(tx)** Krivolutskaya 1996a:365; Yanovskii 1999:354.

Page 880 ***furukawai*** Murayama. Add:
REFERENCES: **(ds)** Yanovskii 1999:354. **(tx)** Yanovskii 1999:354.

Page 881 ***intermedius*** Ferrari. Add:
REFERENCES: **(cn)** Wermlinger et al. 1999. **(ec)** Wermlinger et al. 1999.

Page 882 ***jeholensis*** Murayama. Add:
REFERENCES: **(ds)** Yanovskii 1999:354. **(tx)** Yanovskii 1999:354.

Page 882 ***kurenzovi*** Stark. Add:
FIGURES: Krivolutskaya 1996a:362 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:364; Yanovskii 1999:354. **(tx)** Krivolutskaya 1996a:364; Yanovskii 1999:354.

Page 882 *ussuriensis* Eggers (synonym of ***kurenzovi*** Stark). Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998; Yanovskii 1999:356. **(tx)** Yanovskii 1999:356.

Page 882 ***kurilensis*** Krivolutskaya. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:363; Yanovskii 1999:354. **(tx)** Krivolutskaya 1996a:363; Yanovskii 1999:354.

Page 883 ***laevis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:22.

Page 883 ***laricis*** Nisiima. Add:
FIGURES: Krivolutskaya 1996a:362 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:363; Yanovskii 1999:354. **(tx)** Krivolutskaya 1996a:363; Yanovskii 1999:354.

Page 883 ***laticollis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:23.

Page 883 ***latus*** Eggers. Add:
FIGURES: Krivolutskaya 1996a:334 (habitus).
REFERENCES: **(ds)** Kido & Azuma 1995; Krivolutskaya 1996a:365; Kulinich & Orlinskii 1998; Yanovskii 1999:354. **(tx)** Krivolutskaya 1996a:365; Yanovskii 1999:354.

Page 883 ***lipingensis*** Tsai & Li. Add:
REFERENCES: **(ds)** Yang 1996. **(ec)** Chen et al. 1999; Yang 1996. **(hb)** Chen et al. 1999.

Page 884 ***mandschuricus*** Eggers. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:365; Yanovskii 1999:355. **(tx)** Krivolutskaya 1996a:365; Yanovskii 1999:355.

Page 884 ***massonianus*** Tsai & Li. Add:
FIGURES: Anonymous 1992a:633 (aedeagus, habitus).
DISTRIBUTION: ASIA: China (Guizhou, Hunan).
HOSTS: *Pinus massoniana*.
REFERENCES: **(ds)** Anonymous 1992a:633. **(ec)** Yang 1996. **(tx)** Anonymous 1992a:633.

Page 885 ***nitens*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:23.

Page 886 ***paganus*** Eichhoff. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Page 886 ***parvus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:24.

Page 886 ***piceae*** (Ratzeburg). Add:
DISTRIBUTION: EUROPE: Latvia.
HOSTS: *Cedrus atlantica*.
REFERENCES: **(cn)** Cerchiarini & Tiberi 1997; Grodzki 1998a; Mihalache, Mihalciuc, & Ciornei 1997; Öymen 1992; Podlaski et al. 1999; Simionescu 1995; Tiberi 1997; Wermlinger et al. 1999; Witrylak 1995. **(ds)** Benhalima et al. 1999; Cerchiarini & Tiberi 1997; Kulinich & Orlinskii 1998; Öymen 1992; Riba 1996; Telnov et al. 1997:135; Voolma, Õunap, & Süda 1997b:38; Yanovskii 1999:355. **(ec)** Benhalima et al. 1999; Podlaski et al. 1999; Simionescu 1995; Wermlinger et al. 1999; Witrylak 1995. **(hb)** Benhalima et al. 1999; Cerchiarini & Tiberi 1997; Riba & Blas 1998; Witrylak 1995. **(tx)** Voolma, Õunap, & Süda 1997b: 38; Yanovskii 1999:355.

Page 889 ***piceus*** Eggers. Add:
FIGURES: Dajoz 1998:417 (gallery pattern); Krivolutskaya 1996a:334 (antenna).
REFERENCES: **(ds)** Krivolutskaya 1996a:364; Kulinich & Orlinskii 1998; Yanovskii 1999:355. **(tx)** Krivolutskaya 1996a:364; Yanovskii 1999:355.

Page 889 ***pilosulus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:24.

Page 889 ***pruni*** Eggers. Add:
FIGURES: Krivolutskaya 1996a:362 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:364; Yanovskii 1999:355. **(tx)** Krivolutskaya 1996a:364; Yanovskii 1999:355.

Page 889 ***pseudochinlingensis*** Tsai & Li. Add:
REFERENCES: **(ec)** Chen et al. 1999. **(hb)** Chen et al. 1999.

Page 890 ***redikorzevi*** Berger. Add:
FIGURES: Krivolutskaya 1996a:362 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:363; Kulinich & Orlinskii 1998; Yanovskii 1999:355. **(tx)** Krivolutskaya 1996a:363; Yanovskii 1999:355.

Page 892 ***saltuarius*** Weise. Add:
FIGURES: Krivolutskaya 1996a:334 (habitus).
DISTRIBUTION: EUROPE: Estonia.
REFERENCES: **(bv)** Peltonen, Heliövaara, & Väisänen 1997. **(cn)** Wermlinger et al. 1999. **(ds)** Holzschuh & Perny 1996:5; Krivolutskaya 1996a:363; Kulinich & Orlinskii 1998; Peltonen et al. 1998; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:38, 2000:69; Yanovskii 1999: 355. **(ec)** Hedqvist 1998:78; Jakūs 1995a; Martikainen et al. 1999; Peltonen & Heliövaara 1998; Peltonen, Heliövaara, & Väisänen 1997; Peltonen et al. 1998; Wermlinger et al. 1999. **(hb)** Klimetzek & Schlenstedt

1991; Peltonen, Heliövaara, & Väisänen 1997. **(tx)** Krivolutskaya 1996a: 363; Voolma, Õunap, & Süda 1997b:38; Yanovskii 1999:355.

Page 894 ***scopiger*** Berger. Add:
FIGURES: Krivolutskaya 1996a:334 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:364; Yanovskii 1999:355. **(tx)** Krivolutskaya 1996a:364; Yanovskii 1999:355.

Page 894 *padi* Krivolutskaya (synonym of ***scopiger*** Berger). Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:363; Yanovskii 1999:355. **(tx)** Krivolutskaya 1996a:363; Yanovskii 1999:355.

Page 894 ***sichotensis*** Kurenzov. Add:
FIGURES: Krivolutskaya 1996a:334 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:365; Kulinich & Orlinskii 1998; Yanovskii 1999:355. **(tx)** Krivolutskaya 1996a:365; Yanovskii 1999:355.

Page 895 ***striatulus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:25.

Page 896 ***substriatus*** Schedl. Add:
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: **(ds)** Bright 2000:78.

Page 896 *tabulaeformis chienzhuangensis* Tsai & Li (synonym of ***tabulaeformis*** Tsai & Li). Add:
REFERENCES: **(ec)** Yang 1996.

Page 897 ***tenuis*** Schedl. Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Page 897 ***terminaliae*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:26.

Page 897 ***trypanus*** Sampson. Add:
HOSTS: Branches and trunks of *Calophyllum inophyllum* var. *takamaka*.
REFERENCES: **(ec)** Wainhouse et al. 1998. **(hb)** Wainhouse et al. 1998.

Page 897 ***viburni*** Stark. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:364; Yanovskii 1999:356. **(tx)** Krivolutskaya 1996a:364; Yanovskii 1999:356.

Page 898 ***walkeri*** (Blandford). Add:
HOSTS: *Bruguiera* sp.
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 898 ***yamaguchii*** Inouye & Nobuchi. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:362. **(tx)** Krivolutskaya 1996a:362.

jatropha Sampson. Add:
NOTES: Nomen nudum (synonym of ***Hypothenemus seriatus*** (Eichhoff)).
REFERENCES: **(tx)** Beaver 1995:21.

Genus **Margadillius** Hopkins

Page 898 ***carinatus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:37.

Page 899 ***fulvus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:38.

Page 899 ***terminaliae*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:38.

Genus **Ptilopodius** Hopkins

Page 899 ***formosanus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:44.

Page 900 ***ramosus*** Beeson. Add:
REFERENCES: **(ds)** Paulin 1998:181.

Genus **Cosmoderes** Eichhoff

Page 901 ***donisi*** (Schedl). Delete this entry. Error in original generic name (Beaver 1998c:186).

Page 901 ***monilicollis*** Eichhoff. Add:
DISTRIBUTION: ASIA: Tailand (Chiangmai).
REFERENCES: **(ds)** Beaver 1999d:179.

Genus **Cryptocarenus** Eggers

Page 902 **Cryptocarenus** Eggers. Add:
REFERENCES: **(ds)** Abreu, Fonseca, & Marques 1997.

Page 902 ***acaciae*** Schedl. Add:
HOSTS: *Gleditsia triacanthos* (Viana 1964:125).

Page 903 ***diadematus*** Eggers. Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Abreu, Fonseca, & Marques 1997; Flechtmann & Ottati 1996; Mezzomo et al. 1998:84. **(hb)** Dall'Oglio & Filho 1997.

Page 903 ***heveae*** (Hagedorn). Add:
DISTRIBUTION: NORTH AMERICA: **Dominican Republic** (see Appendix). SOUTH AMERICA: **Tobago** (see Appendix).
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Abreu, Fonseca, & Marques 1997; Flechtmann & Ottati 1996; Iturre & Darchuck 1996; Mezzomo et al. 1998:84; Peck & Thomas 1998:160. (**hb**) Dall'Oglio & Filho 1997.

Page 903 ***lepidus*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: Dominica.
REFERENCES: (**ds**) Cognato & Bright 1996:72.

Page 903 ***punctifrons*** Schedl. Add:
HOSTS: *Ligustrum lucidum* (Viana 1964:125).

Page 904 ***seriatus*** Eggers. Add:
DISTRIBUTION: NORTH AMERICA: Dominica.
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Abreu, Fonseca, & Marques 1997; Borges 1990:203; Cognato & Bright 1996:72; Mezzomo et al. 1998:84; Peck & Thomas 1998:160. (**hb**) Dall'Oglio & Filho 1997.

Genus **Hypothenemus** Westwood

Page 904 **Hypothenemus** Westwood. Add:
KEYS: Krivolutskaya 1996a:368 (to East Russian species).
REFERENCES: (**ds**) Abreu, Fonseca, & Marques 1997. (**tx**) Krivolutskaya 1996a:368.

Page 906 ***africanus*** (Hopkins). Add:
HOSTS: Petiole of *Cecropia peltata*.
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64; Jordal & Kirkendall 1998. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Jordal & Kirkendall 1998; Mattson et al. 1994:12. (**hb**) Jordal & Kirkendall 1998.

Page 906 ***agnatus*** (Eggers). Add *tungamwansolus* Schedl and *confusus* Eggers as ynonyms. Add:
SYNONYMY: Beaver & Löyttyniemi 1989:288.
REFERENCES: (**hb**) Beaver & Löyttyniemi 1989:288.

Page 906 ***areccae*** (Hornung). Add:
REFERENCES: (**ds**) Mattson et al. 1994:12; Peck & Thomas 1998:160.

Page 907 *vafer* Blandford (synonym of ***areccae*** (Hornung)). Add:
REFERENCES: (**ds**) Paulin 1998:181.

Page 908 ***artocarpi*** Browne. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998.

Page 909 ***birmanus*** (Eichhoff). Add:

FIGURES: Anonymous 1992a:634 (habitus).

DISTRIBUTION: ASIA: China (Hunan). SOUTH AMERICA: Ecuador (Fernandina, Isabela, San Cristobal in Galápagos Islands), **Tobago** (see Appendix).

HOSTS: *Bruguiera* sp., *Eugenia caryophyllata*.

REFERENCES: (**ds**) Anonymous 1992a:634; Beaver 1999d:180; Bright & Peck 1998:242,249; Jordal & Kirkendall 1998; Peck & Thomas 1998: 160; Waterhouse 1997:43,48; Veenakumari, Mohanraj, & Bandyopadhyay 1997. (**ec**) Veenakumari, Mohanraj, & Bandyopadhyay 1997. (**tx**) Anonymous 1992a:634.

Page 910 *pacificus* Beeson (synonym of ***birmanus*** (Eichhoff)). Add:

REFERENCES: (**ds**) Paulin 1998:181.

Page 911 ***bolivianus*** (Eggers). Add:

REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. (**cn**) Flechtmann & Gaspareto 1997b:64; Morales et al. 1999. (**ds**) Abreu, Fonseca, & Marques 1997; Flechtmann & Ottati 1996; Mezzomo et al. 1998:84. (**hb**) Dall'Oglio & Filho 1997; Morales et al. 1999.

Page 911 ***brunneus*** (Hopkins). Add:

DISTRIBUTION: SOUTH AMERICA: Ecuador (Fernandina, Floreana, Isabela, Marchena, Pinta, San Cristobal in Galápagos Islands).

REFERENCES: (**ds**) Bright & Peck 1998:243,249; Mattson et al. 1994: 12; Peck & Thomas 1998:160.

Page 912 ***californicus*** Hopkins. Add:

DISTRIBUTION: SOUTH AMERICA: Ecuador (Española, Fernandina, Floreana, Isabela, San Cristobal, Santa Cruz in Galápagos Islands).

REFERENCES: (**ds**) Bright & Peck 1998:243,249; Mattson et al. 1994: 12; Peck & Thomas 1998:160.

Page 912 ***columbi*** Hopkins. Add:

DISTRIBUTION: SOUTH AMERICA: Ecuador (Española, Genovesa, Isabela, Marchena, San Cristobal, Santa Cruz in Galápagos Islands).

REFERENCES: (**ds**) Bright & Peck 1998:243,249; Peck & Thomas 1998:160.

Page 913 *confusus* (Eggers). Move to ***agnatus*** Eggers as a synonym.

Page 913 ***corni*** Kurenzov. Add:

REFERENCES: (**ds**) Krivolutskaya 1996a:368; Yanovskii 1999:356. (**tx**) Krivolutskaya 1996a:368; Yanovskii 1999:356.

Page 914 ***crudiae*** (Panzer). Add:

DISTRIBUTION: NORTH AMERICA: **Dominican Republic** (see Appendix). SOUTH AMERICA: Ecuador (San Cristobal, Santa Cruz in Galápagos Islands).

HOSTS: Petioles of *Cecropia obtusifolia* and *C. peltata*.

REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(ds)** Bright & Peck 1998:244,249; Jordal & Kirkendall 1998; Mattson et al. 1994:12; Peck & Thomas 1998:160. **(hb)** Jordal & Kirkendall 1998.

Page 916 ***dissimilis*** (Zimmerman). Add:
DISTRIBUTION: NORTH AMERICA: United States (**Kansas**) (see Appendix).
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 917 ***distinctus*** Wood. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 917 ***elaphus*** (Eichhoff). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Santiago del Estero).
HOSTS: *Eucalyptus tereticornis.*
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64. **(ds)** Iturre & Darchuck 1996. **(hb)** Dall'Oglio & Filho 1997.

Page 918 ***erectus*** Leconte. Add:
REFERENCES: **(ds)** Mattson et al. 1994:12.

Page 919 ***eruditus*** Westwood. Add:
FIGURES: Anonymous 1992a:634 (habitus).
DISTRIBUTION: ASIA: China (Hunan). EUROPE: Turkey. NORTH AMERICA: Cuba, Dominica, **Dominican Republic** (see Appendix). SOUTH AMERICA: Ecuador (Pinta, Rábida, San Cristobal, Santa Fé, Santiago, Seymour in Galápagos Islands), **Tobago** (see Appendix).
HOSTS: *Acacia mangium*, *Cecropia peltata* (leaf petioles, *C. obtusifolia* (leaf petioles), and *C.* spp. (leaf petioles), *Coffea* sp. (beans), *Eucalyptus tereticornis*, *Gliricidia maculata* (seeds), *Ochroma pyrimidale*.
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999; Jordal & Kirkendall 1998. **(cn)** Flechtmann & Gaspareto 1997b:64; Morales et al. 1999. **(ds)** Abreu, Fonseca, & Marques 1997; Anonymous 1992a:634; Bright & Peck 1998:244,249; Cognato & Bright 1996:72; Flechtmann & Ottati 1996; Ho & Maznah 1995; Iturre & Darchuck 1996; Jordal & Kirkendall 1998; Lombardero 1995:364; Mezzomo et al. 1998:84; Peck & Thomas 1998:160; Riba 1996; Vázquez, Tur, & Monteagudo 1996; Vijayalakshmi et al. 1999; Waterhouse 1997:43,48. **(hb)** Dall'Oglio & Filho 1997; Jordal & Kirkendall 1998; Morales et al. 1999. **(tx)** Anonymous 1992a:634.

Page 920 *aspericollis* Wollaston (synonym of ***eruditus*** Westwood). Add:
REFERENCES: **(ds)** Stevanovic 1998.

Page 921 *insularis* Perkins (synonym of ***eruditus*** Westwood). Add:
FIGURES: Krivolutskaya 1996a:372 (habitus).
REFERENCES: **(ds)** Krivolutskaya 1996a:368. **(tx)** Krivolutskaya 1996a:368.

Page 926 *costalimai* Nunberg (synonym of ***fuscicollis*** (Eichhoff)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:55.

Page 926 ***gossypii*** (Hopkins). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 927 ***hampei*** (Ferrari). Add:
HOSTS: *Muehlenbeckia sagittifolia* (Viana 1964:122).
REFERENCES: **(an)** Andreev et al. 1998; Borsa & Coustau 1996; Borsa & Gingerich 1995; Borsa & Kjellberg 1996a, 1996b; Breilid et al. 1997; Brun et al. 1995; Ffrench-Constant 1999; Ffrench-Constant et al. 1996; Jacobsen, Brun, & Kirkendall 1997; Pérez et al. 1995. **(bv)** Bheemaiah, Sreedharan, & Dhruvakumar 1996; Gutierrez-Martinez & Ondarza 1996; Mathieu, Malosse, & Frerot 1998; Mathieu et al. 1997. **(cn)** Alonso, Cabrera, & Barrera 1998; Alves, Almeida, & De Salvo 1998; Anonymous 1995b; Arango 1997; Aristabal et al. 1996, 1998; Barrera 1996; Batista, Almeida, & de Salvo 1998; Bernal et al. 1999; Bheemaiah & Dhruvakumar 1997; Bheemaiah, Sreedharan, & Dhruvakumar 1996; Briscoe 1997; Broadway et al. 1998; Brun & Ffrench-Constant 1997; Brun & Mathieu 1997; Brun & Suckling 1997; Brun, Suckling, & Popay 1995; Burgos et al. 1998; Bustillo & Posada 1996; Bustillo & Villacorta 1996; Bustillo et al. 1995; Campos & Garcia 1997, 1998; Castellanos D. 1997; Castillo & Marban-Mendoza 1996; Castro, Benavides Machado, & Bustillo 1998; Daniel et al. 1997; Decazy 1996; Decazy, Huart, & Garcia 1995; Dufour & Decazy 1997; Dufour, Gonzalez, & Frerot 1999; Dufour et al. 1996, 1997; Ffrench-Constant 1999; Galvez et al. 1999; Garcia & Barrios 1996; Garcia & Campos 1997; Gonzáles, Munoz, & Sosa 1997; Gravena & Yamamoto 1994; Guharay & Monterrey 1997; Guharay et al. 1999; Hernandez & Cordova 1998; Hoffmann 1998; Jarquin & Barrera 1998; Johnson, Williams, & Roberts 1997; Junianto & Sri 1995; Leach, Stonehouse, & Baker 1999; Lopez-Vaamonde & Moore 1998; Mabbett 1998; Madappa 1995; Mathieu et al. 1999; Mendoza, Gómez, & Baena 1997; Mugo, Omondi, & Ndugo 1997; Murillo & Landinez 1997; Nyambo, Masaba, & Hakiza 1996; Ortiz et al. 1998; de Pena, M. 1996; Pérez-Lachaud 1998; Portilla 1999; Quintero et al. 1998; Rahiman & Vijayalakshmi 1998a, 1998b, 1999a, 1999b, 1999c; Reddy & Rao 1999; Remond & Cilas 1997; Remond et al. 1995; Reyes et al. 1996; Rivera & Bustillo 1996; Rodriguez 1998; Rodriguez et al. 1998; Rosales & González 1996; de la Rosa-Reyes, Godinez-Aguilar, & Alatorre-Rosas 1995; de la Rosa-Reyes et al. 1997; Seneviratne 1995; Sosa-Gómez 1999; Sreedharan 1995; Varela R. 1997; Varela R. & Morales 1996; Vega & Mercadier 1998; Vega et al. 1999; Velasco, Berstain, & Diaz 1998; Vélez A. 1997; Vélez A. et al. 1999; Vijayalakshmi, Rahiman, & Vijayan 1997; Vijayalakshmi, Vijayan, & Rehman 1999; Waterhouse 1998; Wegbe et al. 1997. **(ds)** Guharay et al. 1999; Paulin 1998:181; Waterhouse 1998. **(ec)** Alonso, Cabrera, & Barrera 1998; Aristizabel et al. 1996, 1997, 1998; Baker et al. 1994; Balakrishnan et al. 1995; Benassi 1995; Briscoe 1997;

Burgos et al. 1998; Bustillo & Posada 1996; Bustillo et al. 1999; Castellanos D. 1997; Castillo & Marban-Mendoza 1996; Damon et al. 1999; Duque & Araugo 1998; Godinez-Aguilar & Alatorre-Rosas 1995; Gonzáles, Munoz, & Sosa 1997; Guadalupe Rojas, Morales-Romos, & Harrington 1999; Gutierrez et al. 1998; Hernandez & Cordova 1998; Howard & Infante 1996; Jarquin & Barrera 1998; Lauziere, Pérez-Lachaud, & Brodeur 1999; Lopez-Vaamonde & Moore 1998; Mathieu, Brun, & Frerot 1997; Mathieu et al. 1997; Nárvaez et al. 1997; Padi 1999; Pérez-Lachaud 1998; Pérez-Lachaud & Hardy 1999; Portilla 1999; Portilla & Bustillo 1995; Posada F. & Vélez A. 1997; Quintero et al. 1998; Rivera, Bridges, & Bustillo 1997; Rodriguez 1998; de la Rosa 1993; de la Rosa-Reyes et al. 1997; Serna, Lopez, & Bustillo 1995; Varaprasad et al. 1994; Vega & Mercadier 1998; Vega, Mercadier, & Dowd 1999; Vega et al. 1999; Vijayan, Rehman, & Vijayalakshmi 1999; Villacorta & Barrera 1996; Waterhouse 1998. **(hb)** Andreev et al. 1998; Barrera, Gomez, & Alauzet 1995; Bheemaiah, Sreedharan, & Dhruvakumar 1996; Castro G. et al. 1998; Cure et al. 1998; Gaviria et al. 1995; Gingerich et al. 1996; Guharay et al. 1999; Guzman, Castillo, & Lopez 1997; Mathieu et al. 1997; Seneviratne 1995; Serna, Lopez, & Bustillo 1995; Waterhouse 1998.

Page 930 ***hirsutus*** (Wood). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 931 ***insignis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:36.

Page 931 ***interstitialis*** (Hopkins). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 932 ***javanus*** (Eggers). Add:
FIGURES: Anonymous 1992a:634 (habitus).
DISTRIBUTION: ASIA: China (Hunan).
REFERENCES: **(ds)** Anonymous 1992a:634; Mattson et al. 1994:12; Peck & Thomas 1998:160. **(tx)** Anonymous 1992a:634.

Page 933 *insularum* Krivolutskaya (synonym of ***krivolutskayae*** Wood). Add:
REFERENCES: **(ds)** Yanovskii 1999:356. **(tx)** Yanovskii 1999:356.

Page 934 ***longipilis*** Schedl. Add:
HOST: *Cayaponia ficifolia.* (Viana 1964:121).

Page 934 ***marshalli*** (Eggers). Add:
NOTES: Head & pronotum of holotype missing; probable synonym of ***aulmanni*** (Hagedorn).
REFERENCES: **(tx)** Beaver 1999a:200.

Page 935 ***miles*** (LeConte). Add:
REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(ds)** Peck & Thomas 1998:160.

Page 935 ***modestus*** (Murayama). Add:
REFERENCES: **(ds)** Yanovskii 1999:355. **(tx)** Yanovskii 1999:355.

Page 936 ***obscurus*** (Fabricius). Add:
DISTRIBUTION: SOUTH AMERICA: Ecuador (Española, Floreana, Genovesa in Galápagos Islands).
HOSTS: *Acacia mangium*.
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. **(cn)** Flechtmann & Gaspareto 1997b:64; Jones, Finson, & Richardson 1998; Jones et al. 1996. **(ds)** Abreu, Fonseca, & Marques 1997; Bright & Peck 1998:245,249; Flechtmann & Ottati 1996; Ho & Maznah 1995; Iturre & Darchuck 1996; Jordal & Kirkendall 1998; Mezzomo et al. 1998:84; Peck & Thomas 1998:160. **(hb)** Dall'Oglio & Filho 1997.

Page 938 ***plumeriae*** (Nordlinger). Add:
DISTRIBUTION: SOUTH AMERICA: **Tobago** (see Appendix).

Page 939 ***pubescens*** Hopkins. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 939 ***rotundicollis*** (Eichhoff). Add:
DISTRIBUTION: NORTH AMERICA: United States (**Oklahoma** (see Appendix)). SOUTH AMERICA: **Tobago** (see Appendix).
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 940 ***seriatus*** (Eichhoff). Add:
DISTRIBUTION: NORTH AMERICA: Cuba. SOUTH AMERICA: Ecuador (Floreana in Galápagos Islands).
HOSTS: *Acalypha wilkesiana*, *Coffea* sp., *Macadamia* sp., *Tetrapanax papyriferum*, *Xanthium pungens*.
REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(cn)** Coto 1999. **(ds)** Beaver 1995:21; Bright & Peck 1998:246,249; Peck & Thomas 1998: 160; Vazquez, Tur, & Monteagudo 1996. **(hb)** Jordal & Kirkendall 1998. **(tx)** Beaver 1995:21.

Page 941 *vulgaris* Schaufuss (synonym of ***seriatus*** (Eichhoff)). Add:
REFERENCES: **(cn)** Shehata 1999. **(hb)** Shehata 1999.

Page 941 *aulmanni* (Hagedorn). Remove from synonymy and elevate to species status.

Page 943 *tonsus* Eggers (listed as a synonym of ***seriatus*** (Eichhoff)). Move to ***aulmanni*** (Hagedorn) as a synonym. Add:
REFERENCES: **(tx)** Beaver 1999a:200.

Page 943 ***setosus*** (Eichhoff). Add:
HOSTS: *Acacia mangium*.
REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(ds)** Ho & Maznah 1995; Jordal & Kirkendall 1998; Peck & Thomas 1998:160. **(hb)** Jordal & Kirken dall 1998.

Page 945 ***squamosus*** (Hopkins). Add:
DISTRIBUTION: SOUTH AMERICA: **Tobago** (see Appendix).
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 946 ***suspectus*** Wood. Add:
REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(ds)** Jordal & Kirkendall 1998. **(hb)** Jordal & Kirkendall 1998.

Page 946 ***teretis*** Wood. Add:
REFERENCES: **(ds)** Jordal & Kirkendall 1998.

Page 946 *tungamwansolus* (Schedl). Move to ***agnatus*** Eggers as a synonym.

Add species: ***aulmanni*** (Hagedorn). Add:
DISTRIBUTION: AFRICA: Congo, Mozambique, South Africa, Uganda, Zambia. ASIA: Thailand (Chiangmai).
HOSTS: *Bauhinia variegata*, *Sesbania grandiflora*.
NOTES: Beaver 1999a:198 (removes species from synonymy with ***seriatus***).
REFERENCES: **(ds)** Beaver 1999a, 1999d:180. **(tx)** Beaver 1999a:198.

indigenus Bright & Peck 1998:245. Holotype ; ECU[ADOR], Galapagos, Santa Cruz, Puntudo, 650 m; CNCI.
REFERENCES: **(ds)** Bright & Peck 1998:245,249. **(tx)** Bright & Peck 1998:245.

insulanus NEW NAME for ***pacificus*** Bright & Peck 1998:246, not Beeson 1940. Holotype ♀; ECU[ADOR], Galapagos, Isabela, Villamil, 1 km W, 1 m; CNCI.
REFERENCES: **(ds)** Bright & Peck 1998:246,249. **(tx)** Bright & Peck 1998:246.

Genus **Trischidias** Hopkins

Page 947 ***atoma*** (Hopkins). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 947 ***exigua*** Wood. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 947 ***georgiae*** Hopkins. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 947 ***minutissima*** Wood. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

Page 947 ***striata*** Atkinson. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:160.

TRIBE CORTHYLINI

Genus **Araptus** Eichhoff

Page 952 ***Araptus*** Eichhoff. Add:
REFERENCES: **(cn)** Coto 1999.

Page 953 ***araujiae*** (Brethes). Add:
HOSTS: *Araujia angustifolia*, *A. hortorum* (Viana 1964:125).

Page 954 ***costaricensis*** (Schedl). Add:
REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(ds)** Jordal & Kirkendall 1998. **(hb)** Jordal & Kirkendall 1998.

Page 955 ***dentifrons*** Wood. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:161.

Page 956 ***fossifrons*** Wood. Add:
HOSTS: *Marsdenic mexicana* (see Appendix).

Page 956 ***frenatus*** (Schedl). Add:
HOSTS: *Schinopsis* sp. (Viana 1964:125).

Page 957 ***granulipennis*** (Schedl). Add:
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64.

Page 957 ***hymenaeae*** (Eggers). Add:
DISTRIBUTION: NORTH AMERICA: **Honduras** (S. Francisco, Morazán) (see Appendix).

Page 958 ***laevigatus*** (Eggers). Add:
HOSTS: Petiole of *Cecropia insignis*.
REFERENCES: **(bv)** Jordal & Kirkendall 1998. **(ds)** Jordal & Kirkendall 1998. **(hb)** Jordal & Kirkendall 1998.

Page 960 ***novateutonicus*** (Schedl). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1950:284).

Page 960 ***oleanderi*** (Schedl). Add:
REFERENCES: **(ds)** Öymen 1992.

Page 961 ***pubescens*** (Schedl). Add:
HOSTS: *Morrenia brachystephana* (Viana 1964:125).

Page 961 ***punctatissimus*** (Schedl). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1950:285).
REFERENCES: **(bv)** Flechtmann & Gaspareto 1997b:64. **(cn)** Flechtmann & Gaspareto 1997b:64.

Page 961 ***sparsepunctatus*** (Schedl). Add:

HOSTS: *Erythrina cristagalli*, *Gleditsia triacanthos* (Viana 1964:125).

Add species:

Add species: ***franzi*** Bright & Peck 1998:247. Holotype ♀; ECU[ADOR]: Galap., Isabela, Tagus Cove, 100 m; CNCI.

REFERENCES: (**ds**) Bright & Peck 1998:247,249. (**tx**) Bright & Peck 1998:247.

Genus **Conophthorus** Hopkins

Page 963 **Conophthorus** Hopkins. Add:

KEYS: Cibrián et al. 1995:56 (to Mexican species).

FIGURES: Cibrián et al. 1995:55,57 (adults, damage).

REFERENCES: (**cn**) Cibrián et al. 1995:57. (**ds**) Falader et al. 1998. (**hb**) Cibrián et al. 1995:57. (**tx**) Cibrián et al. 1995:56.

Page 963 ***apachecae*** Hopkins. Add:

DISTRIBUTION: NORTH AMERICA: Mexico (Chihuahua, Durango).

REFERENCES: (**ds**) Cibrián et al. 1995:57.

Page 963 ***conicolens*** Wood. Add:

DISTRIBUTION: NORTH AMERICA: Mexico (Baja California Sur, Chihuahua, Coahuila, Durango, Guanajuato, Jalisco, Morelos, Tlaxcala).

HOSTS: *Pinus douglasiana*.

REFERENCES: (**bv**) Rio Moro & Mayo J. 1988. (**ds**) Cibrián et al. 1995: 57; Rio Moro & Mayo J. 1988. (**ec**) Rio Moro & Mayo J. 1988. (**hb**) Rio Moro & Mayo J. 1988.

Page 963 ***coniperda*** (Schwarz). Add:

REFERENCES: (**an**) Santiago-Blay & Young 1995. (**bv**) Birgersson et al. 1995; Borden 1997; de Groot & DeBarr 1998; de Groot, DeBarr, & Birgersson 1998; Skillen et al. 1997:85. (**cn**) Borden 1997; de Groot & DeBarr 1998; Miller, Turgeon, & de Groot 1995; Zylstra, de Groot, & Helson 1995. (**ds**) Lavoie, Elias, & Filion 1997:398; Miller, Turgeon, & de Groot 1995.

Page 964 ***edulis*** Hopkins. Add:

DISTRIBUTION: NORTH AMERICA: Mexico (Baja California Sur, Coahuila, Durango, Guanjuato, Hidalgo, Querétaro, Pueblo, San Luis Potosí, Sonora, Zacatecas).

HOSTS: *Pinus discolor*, *P. lagunae*.

REFERENCES: (**ds**) Cibrián et al. 1995:57.

Page 964 ***mexicanus*** Wood. Add:

DISTRIBUTION: NORTH AMERICA: **Guatemala** (**Zacapa**) (see Appendix), Mexico (Hidalgo, Veracruz). Delete "Mexico (Chiapas)" from Distribution in Supplement 1 (page 202).

HOSTS: *Pinus patula*.

REFERENCES: (**ds**) Cibrián et al. 1995:57.

Page 964 ***michoacanae*** Wood. Add:
REFERENCES: (**ds**) Cibrián et al. 1995:57; Rio Moro & Mayo J. 1988.

Page 965 ***monophyllae*** Hopkins. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Baja California Norte).
REFERENCES: (**ds**) Cibrián et al. 1995:57.

Page 965 ***ponderosae*** Hopkins. Add:
FIGURES: Santiago-Blay & Young 1995 (♂ & ♀ tergites).
DISTRIBUTION: NORTH AMERICA: Mexico (Chihuahua, Coahuila, Distrito Federal, Hidalgo, Jalisco, Morelos, Nuevo León, Puebla, Sonora, Tlaxcala, Veracruz).
HOSTS: *Pinus arizonica*, *P. ayacahuite*, *P. cooperi*, *P. hartwegii*, *P. pringlei*, *P. pseudostrobus*, *P. rudis*.
REFERENCES: (**an**) Santiago-Blay & Young 1995. (**cn**) Furniss 1997b; Miller, Turgeon, & de Groot 1995. (**ds**) Cibrián et al. 1995:57; Miller, Turgeon, & de Groot 1995.

Page 966 ***radiatae*** Hopkins. Add:
REFERENCES: (**ec**) Hoover et al. 1995, 1996; Storer, Wood, & Gordon 1999.

Page 967 ***resinosae*** Hopkins. Add:
REFERENCES: (**bv**) Borden 1997; de Groot & MacDonald 1999; de Groot & Zylstra 1995; Pierce et al. 1995; Skillen et al. 1997:87. (**cn**) Borden 1997; de Groot & Zylstra 1995; Miller, Turgeon, & de Groot 1995; Zylstra, de Groot, & Helson 1995. (**ds**) Miller, Turgeon, & de Groot 1995. (**hb**) Yamada 1995.

Page 968 ***teocotum*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Mexico).
REFERENCES: (**ds**) Cibrián et al. 1965:57; Rio Moro & Mayo J. 1988.

Page 968 ***terminalis*** Flores & Bright. Add:
FIGURES: Cibrián et al. 1995:88 (adult, damage).
REFERENCES: (**cn**) Cibrián et al. 1995:88. (**ds**) Cibrián et al. 1995:88. (**hb**) Cibrián et al. 1995:88.

Genus **Pityoborus** Blackman

Page 968 ***comatus*** (Zimmermann). Add:
REFERENCES: (**ds**) Peck & Thomas 1998:160.

Genus **Spermophthorus** Costa Lima

Page 971 ***apuleiae*** Costa Lima. Add:
HOSTS: *Schinopsis balansae* (Viana 1964:125).

Genus **Pseudopityophthorus** Swaine

Page 971 **Pseudopityophthorus** Swaine: Add:
FIGURES: Cibrián et al. 1995:345 (adult, damage, gallery pattern).
REFERENCES: **(cn)** Cibrián et al. 1995:344. **(ds)** Cibrián et al. 1995: 344. **(hb)** Cibrián et al. 1995:344.

Page 972 ***asperulus*** (LeConte). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:161.

Page 973 ***minutissimus*** (Zimmermann): Add:
DISTRIBUTION: NORTH AMERICA: Canada (**Nova Scotia** (see Appendix), Ontario, Quebec).
References: **(ds)** Bain 1998:39, 1999; Lavoie, Elias, & Filion 1997:398; Peck & Thomas 1998:161.

Page 974 ***pruinosus*** (Eichhoff). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:161.

Page 975 ***pubipennis*** (LeConte). Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: **(ds)** Furniss & Johnson 1998:339. **(hb)** Furniss & Johnson 1998:339.

Genus **Pityophthorus** Eichhoff

Page 976 **Pityophthorus** Eichhoff. Add:
KEYS: Krivolutskaya 1996a:369 (to Eastern Russian species); Voolma, Õunap, & Süda 1997b:38 (to Estonian species).
FIGURES: Cibrián et al. 1995:85 (damage).
REFERENCES: **(cn)** Cibrián et al. 1995:84. **(ds)** Bain 1999; Cibrián et al. 1995:84; Hastings 1998; Lavoie, Elias, & Filion 1997:398. **(ec)** Hoover et al. 1996; Storer, Wood, & Gordon 1999. **(hb)** Cibrián et al. 1995:84. **(tx)** Krivolutskaya 1996a:369; Voolma, Õunap, & Süda 1997b:38.

Page 978 ***abietinus*** Wood. Add *kurentzovi* Krivolutskaya 1996a:370 as an unnecessary replacement name.
REFERENCES: **(ds)** Yanovskii 1999:356. **(tx)** Yanovskii 1999:356.

Page 978 *abietis* Kurenzov (synonym of ***abietinus*** Wood). Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998.

Page 979 ***alpinensis*** Hopping. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: **(ds)** Furniss & Johnson 1995:339. **(hb)** Furniss & Johnson 1995:339.

Page 980 ***annectens*** LeConte. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:161.

Page 981 ***anticus*** Schedl. Add:
REFERENCES: (**ds**) Borges 1990:203.

Page 982 ***argentinensis*** Eggers. Add:
HOSTS: *Terminalia australis* (Viana 1964:125).

Page 982 ***aztecus*** Bright. Add:
FIGURES: Cibrián et al. 1995:87 (adults, damage).
DISTRIBUTION: NORTH AMERICA: Mexico (Morelos).
HOSTS: *Pinus ayacahuite*, *P. hartwegii*, *P. montezumae*, *P. rudis*, *P. teocote*.
REFERENCES: (**cn**) Cibrián et al. 1995:87. (**ds**) Cibrián et al. 1995:87. (**hb**) Cibrián et al. 1995:87.

Page 982 ***balcanicus*** Pfeffer. Add:
DISTRIBUTION: EUROPE: Slovakia.
REFERENCES: (**ds**) Whitehead 1999.

Page 982 ***balsameus*** Blackman. Add:
DISTRIBUTION: NORTH AMERICA: United States (**Maryland**) (see Appendix).

Page 984 ***borrichiae*** Wood. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:161.

Page 984 ***brighti*** Wood. Add:
FIGURES: Cibrián et al. 1995:341 (adult).
DISTRIBUTION: NORTH AMERICA: Mexico (Distrito Federal, Michoacán).
REFERENCES: (**cn**) Cibrián et al. 1995:340. (**ds**) Cibrián et al. 1995:340. (**hb**) Cibrián et al. 1995:340.

Page 985 *blackmani* Bright (synonym of ***brighti*** Wood). Add:
REFERENCES: (**cn**) Cibrián et al. 1995:340; Tkacz et al. 1998:18,21. (**ds**) Cibrián et al. 1995:340; Tkacz et al. 1998:18,21. (**hb**) Cibrián et al. 1995:340.

Page 985 ***buyssoni*** Reitter. Add:
REFERENCES: (**ds**) Hastings 1998. (**tx**) Węgrzynowicz & Mokrzycki 1996:57.

Page 986 ***cariniceps*** LeConte. Add:
DISTRIBUTION: NORTH AMERICA: United States (**Maryland**) (see Appendix).

Page 987 ***carmeli*** Swaine. Add:
REFERENCES: (**ds**) Dallara 1997. (**ec**) Dallara 1997; Dallara et al. 1995; Storer et al. 1999. (**tx**) Dallara 1997.

Page 987 ***carniolicus*** Wichmann. Add:
REFERENCES: (**ds**) Schott 2000. (**tx**) Węgrzynowicz & Mokrzycki 1996:57.

Page 988 ***cephalonicae*** Pfeffer. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:57.

Page 988 *polonicus* Karpinski (synonym of ***cephalonicae*** Pfeffer). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:57.

Page 989 ***concentralis*** Eichhoff. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:161.

Page 989 ***confertus*** Swaine. Add:
REFERENCES: (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 990 ***confinis*** LeConte. Add:
REFERENCES: (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 990 ***confusus*** Blandford. Add:
REFERENCES: (**bv**) Flechtmann, Dalusky, & Berisford 1999. (**cn**) Haack & Paiz-Schwartz 1997:73. (**ds**) Peck & Thomas 1998:161. (**hb**) Haack & Paiz-Schwartz 1997:73.

Page 991 ***consimilis*** LeConte. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:161.

Page 993 ***crinalis*** Blackman. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:161.

Page 993 ***deletus*** LeConte. Add:
DISTRIBUTION: NORTH AMERICA: United States (**Idaho**) (see Appendix).
REFERENCES: (**hb**) Peck, Equihua-Martinez, & Ross 1997:207.

Page 997 ***elatinus*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Distrito Federal, Tlaxcala).
REFERENCES: (**cn**) Cibrián et al. 1995:342; Tkacz et al. 1998:18,21. (**ds**) Cibrián et al. 1995:342; Tkacz et al. 1998:18,21. (**hb**) Cibrián et al. 1995:342.

Page 998 ***exsculptus*** (Ratzberg). Add:
REFERENCES: (**ec**) Kula & Ząbecki 1999a, 1999b. (**hb**) Klimetzek & Schlenstedt 1991.

Page 1000 ***glabratus*** Eichoff. Add:
DISTRIBUTION: EUROPE: Estonia.
REFERENCES: (**ds**) Hansen, M. 1996:212; Kulinich & Orlinskii 1998; Lakatos 1999c; Riba 1996; Voolma, Õunap, & Süda 1997b:38, 2000:71; Yanovskii 1999:356. (**ec**) Hedqvist 1998:78. (**tx**) Bense & Schott 1998: 326; Voolma, Õunap, & Süda 1997b:38; Yanovskii 1999:356.

Page 1001 ***grandis*** Blackman. Add:
DISTRIBUTION: NORTH AMERICA: United States (Washington).
REFERENCES: (**ds**) Furniss & Johnson 1995:339. (**hb**) Furniss & Johnson 1995:339; Peck, Equihua-Martinez, & Ross 1997:207.

Page 1004 ***jucundus*** Blandford. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:370; Yanovskii 1999:356. **(tx)** Krivolutskaya 1996a:370; Yanovskii 1999:356.

Page 1006 ***lapponicus*** Stark. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:370; Kulinich & Orlinskii 1998; Yanovskii 1999:356. **(tx)** Krivolutskaya 1996a:370; Yanovskii 1999:356.

Page 1006 ***lautus*** Eichhoff. Add:
REFERENCES: **(ds)** Katovich & Ostry 1998:102; Peck & Thomas 1998: 161.

Page 1007 ***lichtensteini*** (Ratzeburg). Add:
FIGURES: Krivolutskaya 1996a:324 (declivity); Voolma, Õunap, & Süda 1997b:39 (declivity).
DISTRIBUTION: EUROPE: Estonia.
REFERENCES: **(ds)** Hansen, M. 1996:212; Krivolutskaya 1996a:370; Kulinich & Orlinskii 1998; Peltonen et al. 1998; Sippola, Siitonen, & Kallio 1995; Voolma & Süda 1999:191; Voolma, Õunap, & Süda 1996: 130, 1997a:21, 1997b:39, 2000:70; Whitehouse 1997a, 1997b; Yanovskii 1999:356. **(ec)** Hedqvist 1998:78; Mokrzycki 1995a; Peltonen et al. 1998; Rio Moro & Mayo J. 1988. **(hb)** Rio Moro & Mayo J. 1988. **(tx)** Krivolutskaya 1996a:370; Voolma, Õunap, & Süda 1997b:39; Yanovskii 1999:356.

Page 1009 ***liquidambarus*** Blackman. Add:
DISTRIBUTION: NORTH AMERICA: United States (**Delaware**) (see Appendix).
REFERENCES: **(ds)** Peck & Thomas 1998:161.

Page 1010 ***micrographus*** (Linnaeus). Add:
FIGURES: Voolma, Õunap, & Süda 1997b:39 (declivity).
DISTRIBUTION: EUROPE: Estonia.
REFERENCES: **(ds)** Gutowski & Kubisz 1995; Holzschuh 1995:135; Kulinich & Orlinskii 1998; Öymen 1992; Voolma, Õunap, & Süda 1997a: 21, 1997b:38, 2000:70; Yanovskii 1999:356. **(ec)** Bakke 1996; Hedqvist 1998:78; Kula & Ząbecki 1999b; Martikainen et al. 1999; Õunap 1999. **(hb)** Gutowski & Kubisz 1995. **(tx)** Voolma, Õunap, & Süda 1997b:38; Yanovskii 1999:356.

Page 1012 *micrographus sibiricus* Stark (synonym of ***micrographus*** (Linneaus)). Add:
FIGURES: Krivolutskaya 1996a:324 (declivity).
REFERENCES: **(ds)** Krivolutskaya 1996a:369. **(hb)** Klimetzek & Schlenstedt 1991. **(tx)** Krivolutskaya 1996a:369.

Page 1012 ***micrographtinus*** Wood. Add:
DISTRIBUTION: EUROPE: Latvia.
REFERENCES: **(ds)** Telnov et al. 1997:135.

Page 1013 ***morosovi*** Spessivtsev. Add:

FIGURES: Krivolutskaya 1996a:324 (habitus); Voolma, Õunap, & Süda 1997b:39 (habitus).

DISTRIBUTION: EUROPE: Estonia, Latvia.

REFERENCES: (**ds**) Krivolutskaya 1996a:370; Kulinich & Orlinskii 1998; Telnov et al. 1997:135; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1997a:21, 1997b:39, 2000:71; Yanovskii 1999:357. (**ec**) Hedqvist 1998:78. (**tx**) Krivolutskaya 1996a:370; Voolma, Õunap, & Süda 1997b:39; Yanovskii 1999:357.

Page 1015 ***nitidulus*** (Mannerheim). Add:

REFERENCES: (**ds**) Dallara 1997. (**ec**) Dallara 1997; Dallara et al. 1995; Storer et al. 1999. (**hb**) Peck, Equihua-Martinez, & Ross 1997:207. (**tx**) Dallara 1997; Węgrzynowicz & Mokrzycki 1996:55.

Page 1018 ***orarius*** Bright. Add:

FIGURES: (?)Cibrián et al. 1995:88 (adults, control).

DISTRIBUTION: (?) NORTH AMERICA: Mexico (Durango, Hidalgo).

HOSTS: *Pseudotsuga flahaulti*, *P. macrolepsis.*

NOTES: The treatment of this species in Cibrián et al. 1995 is almost certainly a misidentification. *Pityophthorus orarius* occurs only from southern British Columbia (Canada) to northern California (USA).

REFERENCES: (**bv**) Preisler, Rappaport, & Wood 1997. (**cn**) Cibrián et al. 1995:88. (**ds**) Cibrián et al. 1995:88. (**hb**) Cibrián et al. 1995:88; Preisler, Rappaport, & Wood 1997. (**ms**) Preisler, Rappaport, & Wood 1997.

Page 1019 ***pellitus*** Schedl. Add:

REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:57.

Page 1019 ***pinavorus*** Bright. Add:

REFERENCES: (**ds**) Peck & Thomas 1998:161.

Page 1019 ***pini*** Kurenzov. Add:

REFERENCES: (**ds**) Krivolutskaya 1996a:369; Kulinich & Orlinskii 1998; Yanovskii 1999:357. (**tx**) Krivolutskaya 1996a:369; Yanovskii 1999:357.

Page 1020 ***pityographus*** (Ratzeburg). Add:

FIGURES: Dajoz 1998:417 (gallery pattern).

DISTRIBUTION: EUROPE: Spain.

HOSTS: *Pseudotsugae menziesii.*

REFERENCES: (**bv**) Jakuš 1998a, 1998b, 1998c. (**cn**) Grodzki 1998a; Mihalciuc 1997; Roversi et al. 1995; Wermlinger et al. 1999. (**ds**) Hastings 1998; Holzschuh & Perny 1996:5; Lakatos 1999c; Öymen 1992; Ponel 1995; Riba 1996; Voolma, Õunap, & Süda 1997b:38. (**ec**) Jakuš 1995a, 1998a, 1998b, 1998c; Kula & Ząbecki 1997b, 1998, 1999a, 1999b; Mokrzycki 1995a; Wermlinger et al. 1999. (**hb**) Klimetzek & Schlenstedt 1991; Riba & Blas 1998. (**tx**) Voolma, Õunap, & Süda 1997b:38.

Page 1021 ***puberulus*** (LeConte). Add:
DISTRIBUTION: NORTH AMERICA: United States (**Iowa, Delaware, Maryland**) (see Appendix).

Page 1022 ***pubescens*** (Marsham). Add:
REFERENCES: **(ds)** Hansen, M. 1996:212; Hansen, M., Pedersen, & Pritzl 1999:100; Hansen, M. et al. 1996:270, 1997:92; Lombardero 1995: 360,361; Riba 1996; Voolma, Õunap, & Süda 1997b:39. **(ec)** Hedqvist 1998:78. **(tx)** Voolma, Õunap, & Süda 1997b:39.

Page 1023 ***pulchellus*** Eichhoff. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:161.

Page 1024 ***pulicarius*** (Zimmermann). Add:
REFERENCES: **(bv)** Flechtmann, Dalusky, & Berisford 1999. **(ds)** Peck & Thomas 1998:161.

Page 1024 ***pullus*** (Zimmermann). Add:
REFERENCES: **(ds)** Peck & Thomas 1998:161.

Page 1026 ***rossicus*** Eggers. Add:
REFERENCES: **(ds)** Kulinich & Orlinskii 1998.

Page 1026 ***sachalinensis*** Krivolutskaya. Add:
FIGURES: Krivolutskaya 1996a:324 (declivity).
REFERENCES: **(ds)** Krivolutskaya 1996a:369; Kulinich & Orlinskii 1998; Yanovskii 1999:357. **(tx)** Krivolutskaya 1996a:369; Yanovskii 1999:357.

Page 1026 ***scabridus*** Schedl. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

Page 1028 ***setosus*** Blackman. Add:
REFERENCES: **(ds)** Dallara 1997. **(ec)** Dallara 1997; Dallara et al. 1995; Storer et al. 1999. **(tx)** Dallara 1997.

Page 1028 ***sichotensis*** Kurenzov. Add:
REFERENCES: **(ds)** Krivolutskaya 1996a:369; Kulinich & Orlinskii 1998; Yanovskii 1999:357. **(tx)** Krivolutskaya 1996a:369; Yanovskii 1999:357.

Page 1030 ***subsimilis*** Schedl. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:57.

Page 1031 ***tragardhi*** Spessivtsev. Add:
FIGURES: Holzschuh 1994 (habitus, elytral declivity); Krivolutskaya 1996a:324 (declivity).
DISTRIBUTION: EUROPE: Estonia.
REFERENCES: **(ds)** Holzschuh 1994; Krivolutskaya 1996a:370; Kulinich & Orlinskii 1998; Voolma & Süda 1999:189; Voolma, Õunap, & Süda 1996:130, 1997a:21, 1997b:39, 2000:72; Yanovskii 1999:357. **(ec)** Hedqvist 1998:78; Jakuš 1995a. **(tx)** Bense & Schott 1998:326;

Krivolutskaya 1996a:370; Voolma, Õunap, & Süda 1997b:39; Yanovskii 1999: 357.

Page 1033 ***vrydaghi*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:57.

Page 212S ***pecki*** Atkinson. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:161.
Add species:

muluensis Bright 2000:79. Holotype (♂); Malaysia, Sarawak, Gunung Mulu National Park; NHML (temporarily in CNCI).
FIGURES: Bright 2000:77 (dorsal outline, antenna).
DISTRIBUTION: ASIA: Malaysia (Sarawak).
REFERENCES: (**tx**) Bright 2000:79.

Add name: *kurentzovi* Krivolutskaya 1996a:370.
NOTES: Unnecessary replacement name for *abietis* Kurenzov, not Blackman. See ***abietinus*** Wood.
REFERENCES: (**ds**) Kulinich & Orlinskii 1998. (**tx**) Krivolutskaya 1996a:370.

Genus **Gnathotrichus** Eichhoff

Page 1034 **Gnathotrichus** Eichhoff. Add:
REFERENCES: (**bv**) Kelsey & Joseph 1997, 1999. (**ec**) Nakashima 1999.

Page 1035 ***materiarius*** (Fitch). Add:
DISTRIBUTION: EUROPE: Austria, Finland, Italy.
REFERENCES: (**bv**) Flechtmann, Dalusky, & Berisford 1999. (**ds**) Bain 1998:39; Bense & Schott 1998:326; Faccoli 1998; Hastings 1998; Holzschuh 1995:140; Lavoie, Elias, & Filion 1997:398; Peck & Thomas 1998:161; Shore & McLean 1995; Valkama, Martikainen, & Räty 1998.

Page 1036 ***nitidifrons*** Hopkins. Add:
REFERENCES: (**cn**) Tkacz et al. 1998:18,45. (**ds**) Tkacz et al. 1998: 18,45. (**hb**) Tkacz et al. 1998:18,45.

Page 1036 ***perniciosus*** Wood. Add:
REFERENCES: (**cn**) Tkacz et al. 1998:18,45. (**ds**) Tkacz et al. 1998: 18,45. (**hb**) Tkacz et al. 1998:18,45.

Page 1037 ***retusus*** (LeConte). Add:
REFERENCES: (**bv**) Borden 1995c, 1997; Deglow & Borden 1998a; Shore 1998; Skillen et al. 1997:4. (**cn**) Borden 1995c, 1997; Shore 1998. (**ds**) Shore & McLean 1995. (**hb**) Peck, Equihua- Martinez, & Ross 1997: 207; Shore 1998.

Page 1038 ***sulcatus*** (LeConte). Add:
FIGURES: Cibrián et al. 1995:381 (adult, fungus, gallery pattern).
DISTRIBUTION: NORTH AMERICA: Mexico (Chiapas, Chihuahua, Coahuila, Mexico).

HOSTS: *Pinus durangensis, P. hartwegii, P. oocarpa, Pseudotsuga flahaulti.*
REFERENCES: (**bv**) Borden 1995c; Deglow & Borden 1998a; Shore 1998; Skillen et al. 1997:6. (**cn**) Borden 1995c; Cibrián et al. 1995:380; EPPO/CABI 1992:275, 1997:277; Shore 1998. (**ds**) Cibrián et al. 1995: 380; EPPO/CABI 1992:275, 1997:277; Shore & McLean 1995. (**ec**) EPPO/CABI 1992:275; Shore 1998. (**hb**) Cibrián et al. 1995:380; EPPO/CABI 1992:275, 1997:277; Peck, Equihua-Martinez, & Ross 1997:207; Shore 1998; Shore & McLean 1995. (**tx**) EPPO/CABI 1997: 277.

Genus **Gnathotrupes** Schedl

Page 1040 ***cirratus*** Schedl. Add:
HOSTS: *Nothofagus autartica* (Naumann-Etienne 1978).

Page 1040 ***impressus*** (Schedl). Add:
HOSTS: *Nothofagus autartica* (Naumann-Etienne 1978).

Genus **Tricolus** Blandford

Page 1042 **Tricolus** Blandford. Add:
REFERENCES: (**ds**) Abreu, Fonseca, & Marques 1997.

Page 1043 ***cecropii*** Wood. Add:
REFERENCES: (**bv**) Jordal & Kirkendall 1998. (**ds**) Jordal & Kirkendall 1998. (**hb**) Jordal & Kirkendall 1998.

Page 1043 ***inornatus*** Wood. Add:
HOSTS: *Ardisia* sp. (see Appendix).

Page 1043 ***intrusus*** Wood. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998.

Page 1044 ***nodifer*** Blandford. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998.

Page 1044 ***perdiligens*** Schedl. Add:
DISTRIBUTION: NORTH AMERICA: Dominica.
REFERENCES: (**ds**) Cognato & Bright 1996:72.

Page 1045 ***senex*** Schedl. Add:
REFERENCES: (**ds**) Abreu, Fonseca, & Marques 1997.

Page 1045 ***subincisuralis*** Schedl. Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64. (**cn**) Flechtmann & Gaspareto 1997b:64.

Genus **Amphicranus** Erichson

Page 1045 **Amphicranus** Erichson. Add:
REFERENCES: (**ds**) Abreu, Fonseca, & Marques 1997.

Page 1046 ***dohrni*** (Eichhoff). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1950:285).

Page 1048 ***rasilis*** Schedl. Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64. (**cn**) Flechtmann & Gaspareto 1997b:64.

Page 1050 ***vagabundus*** (Schedl).
Delete "Ecuador" from Distribution in Supplement 1 (page 219).

Genus **Monarthrum** Kirsch

Page 1050 **Monarthrum** Kirsch. Add:
REFERENCES: (**ds**) Abreu, Fonseca, & Marques 1997. (**ec**) Nakashima 1999.

Page 1051 ***bicallosum*** (Schedl). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1950:285).

Page 1052 ***brasiliensis*** (Schedl). Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1950:285).
REFERENCES: (**ds**) Borges 1990:203.

Page 1053 ***cordatum*** (Blandford). Add:
DISTRIBUTION: NORTH AMERICA: **Honduras** (see Appendix).

Page 1053 ***cristatum*** (Ferrari). Add:
REFERENCES: (**cn**) Morales et al. 1999. (**hb**) Morales et al. 1999.

Page 1055 ***fasciatum*** (Say). Add:
REFERENCES: (**bv**) Flechtmann, Dalusky, & Berisford 1999. (**ds**) Peck & Thomas 1998:161; Shore & McLean 1995.

Page 1057 ***laterale*** (Eichhoff). Add:
REFERENCES: (**bv**) Burgos-Solorio 1998.

Page 1058 ***mali*** (Fitch). Add:
HOSTS: *Juglans cinerea*.
REFERENCES: (**ds**) Katovich & Ostry 1998:102; Lavoie, Elias, & Filion 1997:398; Peck & Thomas 1998:161; Shore & McLean 1995.

Page 1062 ***scutellare*** (LeConte). Add:
REFERENCES: (**ds**) Shore & McLean 1995.

Page 1062 ***semipallens*** (Schedl). Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Abreu, Fonseca, & Marques 1997.

Page 1064 ***vernaculum*** (Schedl). Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Mezzomo et al. 1998:84.

Add species: ***meuseli*** (Reitter). Move from ***Xyleborus***. Add:
REFERENCES: (**tx**) Mandelshtam 2001a:203.

Genus **Microcorthylus** Ferrari

Page 1065 **Microcorthylus** Ferrari. Add:
REFERENCES: (**ds**) Abreu, Fonseca, & Marques 1997.

Page 1066 ***minimus*** Schedl. Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Abreu, Fonseca, & Marques 1997; Mezzomo et al. 1998:84. (**hb**) Dall'Oglio & Filho 1997.

Page 1067 ***porrectus*** Schedl. Add:
HOSTS: *Psidium* sp. (Viana 1964:126).

Genus **Corthycyclon** Schedl

Page 1068 ***tardum*** Wood. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998.

Genus **Corthylocurus** Wood

Page 1068 ***brunneus*** (Nunberg). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Page 1069 ***vernaculus*** (Schedl). Add:
REFERENCES: (**cn**) Morales et al. 1999. (**hb**) Morales et al. 1999.

Genus **Corthylus** Erichson

Page 1069 **Corthylus** Erichson. Add:
REFERENCES: (**cn**) Cibrián et al. 1995:382. (**ds**) Abreu, Fonseca, & Marques 1997. (**ec**) Nakashima 1999. (**hb**) Cibrián et al. 1995:382.

Page 1070 ***cecropii*** Wood. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998.

Page 1071 ***columbianus*** Hopkins. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:161; Shore & McLean 1995.

Page 1072 ***convexicauda*** Eggers. Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Mezzomo et al. 1998:84. (**hb**) Dall'Oglio & Filho 1997.

Page 1073 ***detrimentosus*** Schedl. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Jalisco, Michoacán).
HOSTS: *Arbutus xalapensis*.
REFERENCES: (**ds**) Cibrián et al. 1995:382.

Page 1073 ***flagellifer*** Blandford. Add:
REFERENCES: (**bv**) Burgos-Solorio 1998.

Page 1074 ***fuscus*** Blandford. Add:
FIGURES: Cibrián et al. 383 (adult).
DISTRIBUTION: NORTH AMERICA: Mexico (Morelos).
HOSTS: *Amelanchier denticulata*, *Craetagus* spp., *Pyrus communis.*
REFERENCES: (**bv**) Burgos-Solorio 1998. (**ds**) Cibrián et al. 1995:382.

Page 1075 ***mexicanus*** Schedl. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Mexico, Morelos).
REFERENCES: (**ds**) Cibrián et al. 1995:382.

Page 1075 ***mirabilis*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Page 1075 ***nanus*** Wood. Add:
REFERENCES: (**ds**) Jordal & Kirkendall 1998.

Page 1075 ***nudipennis*** Schedl. Add:
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Mezzomo et al. 1998:84.

Page 1076 ***nudus*** Schedl. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Puebla, Oaxaca).
HOSTS: *Alnus acuminata*, *Casuarina equisetifolia*, *Populus balsamifera*, *P. deltoides*, *Salix babylonica.*
REFERENCES: (**ds**) Cibrián et al. 1995:382.

Page 1076 ***papulans*** Eichhoff. Add:
DISTRIBUTION: NORTH AMERICA: **Dominican Republic** (see Appendix), Mexico (Campeche, Jalisco, Morelos).
HOSTS: *Araucaria angustifolia.*
REFERENCES: (**ds**) Borges 1990:203; Cibrián et al. 1995:382.

Page 1076 *spinifer* Schwarz (synonym of ***papulans*** Eichhoff). Add:
REFERENCES: (**ds**) Cibrían et al. 1995:382; Peck & Thomas 1998:161.

Page 1077 ***punctatissimus*** (Zimmermann). Add:
REFERENCES: (**ds**) Peck & Thomas 1998:161; Shore & McLean 1995.

Page 1078 ***retusifer*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: **Guatemala** (Zacapá) (see Appendix).

Page 1079 ***robustus*** Schedl. Add:
REFERENCES: (**cn**) Morales et al. 1999. (**hb**) Morales et al. 1999.

Page 1079 **_schaufussi_** Schedl. Add:
HOSTS: *Araucaria angustifolia*.
REFERENCES: (**bv**) Flechtmann & Gaspareto 1997b:64; Flechtmann, Ottati, & Berisford 1999. (**cn**) Flechtmann & Gaspareto 1997b:64. (**ds**) Borges 1990:203.

Page 1080 **_theobromae_** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:55.

Page 1081 **_villus_** Bright. Add:
DISTRIBUTION: NORTH AMERICA: **Honduras** (S. Francisco Morazán) (see Appendix).

GENERA INCERTAE SEDIS

Page 1082 Move genus **_Cynanchophagus_** and species **_cornutus_** to Dryocoetini.

Add genus: ***Paleoscolytus** Walker 1938:139. Type species: **_Paleoscolytus divergus_**, monotypic (Type species not required, Art.66, ICZN, 1985).
REFERENCES: (**tx**) Jarzembowski 1990; Walker, 1938:139; Wood, S.L. 1982:37.

***_divergus_** Walker 1938:139. Holotype (fossil borings); Petrified Forest National Monument, Arizona; USNM.
FIGURES: Walker 1938:139.
REFERENCES: (**tx**) Jarzembowski 1990; Walker, 1938:139; Wood, S.L. 1982:37.
NOTES: Wood (1982) states that the engravings of this species are too large (5 mm) and branch in a pattern unlike any modern Scolytidae.

***_sussexensis_** Jarzembowski 1990:374. Holotype (fossil borings); Crow Borough, East Sussex, United Kingdom; NHML.
FIGURES: Jarzembowski 1990:375.
REFERENCES: (**tx**) Jarzembowski 1990:374.
NOTES: Judging from the illustrations of the borings, we would consider this species to be not congeneric with the species above. This species should probably be placed in another genus.

Add genus: **Sciatropus** Sampson, 1914. Described without reference to a family. Placed in "Scolytinae?" by Lawrence et al. 2000. Almost certainly is a Cossoninae (Curculionidae).

Add species: **_fuscus_** Sampson 1914:380. Syntypes; Seychelles; NHML.
FIGURES: Sampson 1914:380 (habitus).
DISTRIBUTION: AFRICA: Seychelles.
REFERENCES: (**tx**) Sampson 1914:380.

Catalog of Platypodidae, Supplement 2

The following is a list of significant references that treat the entire family or major portions thereof. Included are references to symposium proceedings, keys, catalogs, and books in addition to references to other categories.

Page 1084 FAMILY PLATYPODIDAE ERICHSON. Add:

KEYS: Krivolutskaya 1996b:374 (to East Russian species); Morrone 1996; Wood 1993:266 (to genera).

REFERENCES: **(an)** Calder 1989, 1990; Krivolutskaya 1996b:374; Lyal & King 1996. **(bv)** Kirkendall, Kent, & Raffa 1997; Lyal & King 1996. **(cn)** Sukartana 1996a, 1996b. **(ec)** Nakashima 1999. **(hb)** Kirkendall & Wood 2000; Kirkendall, Kent, & Raffa 1997; Krivolutskaya 1996b:374. **(tx)** Klimazewski & Watt 1997; Krivolutskaya 1996b:374; Kuschel 1995; Kuschel, Leschen, & Zimmerman 2000; Lyal & King 1996; Wood 1993.

Subfamily Coptonotinae Chapuis

TRIBE COPTONOTINI

Genus **Coptonotus** Chapuis

Page 1084 *cyclops* Chapuis. Add:

FIGURES: Kuschel, Leschen, & Zimmerman 2000:775 (habitus).

REFERENCES: **(tx)** Kuschel, Leschen, & Zimmerman 2000.

TRIBE MECOPELMINI

Genus **Mecopelmus** Blackman

Page 1086 *zeteki* Blackman. Add:

FIGURES: Kuschel, Leschen, & Zimmerman 2000:775 (habitus).

DISTRIBUTION: NORTH AMERICA: **Costa Rica** (Limón Prov.) (see Appendix). SOUTH AMERICA: **Peru** (Tambopata Prov.) (see Appendix).

Genus **Protoplatypus** Wood

Page 1086 *vetulus* Wood. Add:

FIGURES: Kuschel, Leschen, & Zimmerman 2000:775,791 (habitus).

REFERENCES: **(tx)** Kuschel, Leschen, & Zimmerman 2000.

TRIBE SCHEDLARINI

Genus **Schedlarius** Wood

Page 1087 ***mexicanus*** (Duges). Add:
FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus).
REFERENCES: (**tx**) Kuschel, Leschen, & Zimmerman 2000.

Subfamily Tesserocerinae Blandford

TRIBE DIAPODINI

Genus **Diapus** Chapuis

Page 1088 **Diapus** Chapuis. Add:
REFERENCES: (**tx**) Krivolutskaya 1996b:377.

Page 1088 ***aculeatus*** Blandford. Add:
REFERENCES: (**ds**) Krivolutskaya 1996b:377. (**tx**) Krivolutskaya 1996b:377.

Page 1089 ***borneensis*** Browne. Move to **Genyocerus**.

Page 1090 ***pendleburyi*** Schedl. Move to **Genyocerus**.

Page 1090 ***pusillimus*** Chapuis. Add:
REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**hb**) Kirkendall, Kent, & Raffa 1997.

Page 1091 ***quinquespinatus*** Chapuis. Add:
FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus); Nakashima 1999:39 (mycangia).
REFERENCES: (**ec**) Nakashima 1999. (**tx**) Kuschel, Leschen, & Zimmerman 2000.

Page 1092 ***spinatus*** Browne. Move to **Genyocerus**.

Genus **Genyocerus** Motschulsky

Page 1094 ***frontalis*** (Strohmeyer). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:61.

Page 1095 ***sexporus*** (Schedl). Add:
DISTRIBUTION: ASIA: Thailand.
REFERENCES: (**ds**) Beaver 1999c:32.

Page 1095 ***shoreae*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:89.

Page 1096 *albipennis* Strohmeyer (synonym of ***strohmeyeri*** Wood). Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:457.

Page 1096 *furtivus* Sampson (synonym of ***talurae*** (Stebbing)). Add:
REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997. **(ds)** Kirkendall, Kent, & Raffa 1997. **(tx)** Döbler & Gaedike 1995:458.

Add species: ***borneensis*** (Browne). From **Diapus**. Add:
REFERENCES: **(tx)** Beaver 1998c:185; Kikata, Hijii, & Kajimura 1994:87.

pendlebury (Schedl). From **Diapus**. Add:
REFERENCES: **(tx)** Beaver 1998c:185.

spinatus (Browne). From **Diapus**. Add:
REFERENCES: **(tx)** Beaver 1998c:185; Kikata, Hijii, & Kajimura 1994:87.

TRIBE TESSEROCERINI

Genus **Platytarsulus** Schedl

Page 1097 **Platytarsulus** Schedl. Add:
KEYS: Beaver 1998a:67.
REFERENCES: **(tx)** Beaver 1998a.

Page 1097 ***biconicus*** Schedl. Add:
Lectotype is a ♂.
FIGURES: Beaver 1998a:66 (elytral apex); Kuschel, Leschen, & Zimmerman 2000:776 (habitus).
DISTRIBUTION: Replace "Indonesia (Borneo)" with ASIA: Malaysia (Sabah, Sarawak).
HOSTS: *Dryoblanops aromatica*.
REFERENCES: **(ds)** Beaver 1998a:69. **(tx)** Beaver 1998a:69.

Page 1097 *borneensis* Schedl. Move to ***marshalli*** Schedl as a synonym. Add:
Holotype is a ♂.
REFERENCES: **(tx)** Beaver 1998a:69.

Page 1097 ***declivis*** Schedl. Add:
Holotype is a ♀.
FIGURES: Beaver 1998a:66 (elytral apex).
DISTRIBUTION: Replace "Asia (Malaya)" with ASIA: Malaysia (Johore, Pahang, Sarawak, Sabah).
HOSTS: *Shorea lepidota*.
REFERENCES: **(ds)** Beaver 1998a:69. **(tx)** Beaver 1998a:69.

Page 1097 *elongatus* Schedl. Move to ***marshalli*** Schedl as a synonym. Add:
Lectotype is a ♀, not a ♂.
REFERENCES: **(tx)** Beaver 1998a:69.

Page 1097 ***marshalli*** Schedl. Add:

Lectotype, ♀; Borneo, Bettotan, nr. Sandakan; NHML; designated by Beaver 1998a:70.
FIGURES: Beaver 1998a:66 (elytral apex).
DISTRIBUTION: ASIA: Brunei, Indonesia (Sumatra) (?), Malaysia (Sabah, Sarawak, West Malaya), Philippine Islands (?).
REFERENCES: **(ds)** Beaver 1998a:70. **(tx)** Beaver 1998a:70.

Page 1097 ***mirabilis*** Menier. Add:

REFERENCES: **(tx)** Beaver 1998a:70.

Page 1097 ***nanulus*** Schedl. Add:

Holotype is a ♂.
FIGURES: Beaver 1998a:66 (elytral apex).
DISTRIBUTION: ASIA: Brunei, Malaysia (Sabah).
REFERENCES: **(ds)** Beaver 1998a:70. **(tx)** Beaver 1998a:70.

Page 1097 ***tuberculatus*** Browne. Add:

NOTE: Holotype is missing from its card mount and is presumed lost.
REFERENCES: **(tx)** Beaver 1998a:70; Kikata, Hijii, & Kajimura 1994: 136.

Add species: ***adebratti*** Beaver 1998a:67. Holotype ♂; Malaysia, Sabah, Sipitang, Mendolong; ZMLU.

FIGURES: Beaver 1998a:66 (elytral apex).
DISTRIBUTION: ASIA: Malaysia (Sabah).
REFERENCES: **(tx)** Beaver 1998a:67.

confusus Beaver 1998a:68. Holotype ♂; [West Malaysia] Johore North, Kluang; NHMW.

FIGURES: Beaver 1998a:66 (elytral apex).
DISTRIBUTION: ASIA: Brunei, Malaysia (Johor, Sabah, Sarawak, Selangor), Singapore.
HOSTS: *Dryobalanops aromatica* and "kapur logs".
REFERENCES: **(tx)** Beaver 1998a:68.

Genus **Notoplatypus** Lea

Page 1097 ***elongatus*** Lea. Add:

REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997. **(hb)** Kirkendall, Kent, & Raffa 1997.

Genus **Tesserocerus** Saunders

Page 1098 ***belti*** Sharp. Add:

FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus).
REFERENCES: **(tx)** Kuschel, Leschen, & Zimmerman 2000.

Page 1098 ***chapuisi*** Schedl. Add:

FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus).
REFERENCES: **(tx)** Kuschel, Leschen, & Zimmerman 2000.

Page 1098 ***elegans*** Chapuis. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:63.

Page 1100 ***spinax*** Blandford. Add:
DISTRIBUTION: SOUTH AMERICA: **Ecuador**, **French Guiana** (see Appendix).

Genus **Tesserocranulus** Schedl

Page 1101 ***nevermanni*** Schedl. Add:
DISTRIBUTION: SOUTH AMERICA: **Bolivia** (see Appendix).

Genus **Spathidicerus** Chapuis

Page 1101 **Spathidicerus** Chapuis. Add:
KEYS: Beaver 1998b:285.
REFERENCES: **(tx)** Beaver 1998b.

Page 1101 ***corporaali*** Browne. Add:
DISTRIBUTION: ASIA: Brunei.
REFERENCES: **(ds)** Beaver 1998b:291.

Page 1101 ***javanus*** Strohmeyer. Add:
FIGURES: Beaver 1998b:287 (lateral view of declivity).
DISTRIBUTION: ASIA: Malaysia (Sabah).
REFERENCES: **(ds)** Beaver 1998b:291. **(tx)** Beaver 1998b:286,287; Döbler & Gaedike 1995:458.

Page 1101 ***nobilis*** Chapuis. Add:
FIGURES: Beaver 1998b:287 (lateral view of declivity).
REFERENCES: **(tx)** Beaver 1998b:286,287.

Page 1101 ***papuanus*** Schedl. Add:
FIGURES: Beaver 1998b:287 (lateral view of declivity).
REFERENCES: **(tx)** Beaver 1998b:286,287.

Page 1101 ***philippinensis*** Schedl. Add:
FIGURES: Beaver 1998b:287 (lateral view of declivity).
REFERENCES: **(tx)** Beaver 1998b:286,287.

Page 1102 ***sumatranus*** Schedl. Add:
FIGURES: Beaver 1998b:287 (pronotum and mycangia, antenna, lateral view of declivity).
DISTRIBUTION: ASIA: Malaysia (Sabah).
REFERENCES: **(ds)** Beaver 1998b:291. **(tx)** Beaver 1998b:286,287.

Page 1102 ***thomsoni*** Chapuis. Add:
FIGURES: Beaver 1998b:287 (pronotum and mycangia, lateral view of declivity).
REFERENCES: **(tx)** Beaver 1998b:286,287.

Add species: ***browni*** Beaver 1998b:288. Holotype (♂); Sumatra, O. K. (Ost Kuste), Bandar Baroe, 850 m; NHML.
FIGURES: Beaver 1998b:287 (dorsal view of declivity).
DISTRIBUTION: ASIA: Indonesia (Sumatra), Malaysia (West Malaysia), Thailand (Peninsular Siam).
REFERENCES: (**tx**) Beaver 1998b:288.

sulawesianus Beaver 1998b:289. Holotype (♂); Indonesia, Sulawesi Utara, Dumoga-Bone N[ational] P[ark]; 200 m; Museum Zoologicum Bogoriensis, Bogor.
FIGURES: Beaver 1998b:287 (dorsal view of declivity, antenna).
DISTRIBUTION: ASIA: Indonesia (Sulawesi).
REFERENCES: (**tx**) Beaver 1998b:289.

suttoni Beaver 1998b:290. Holotype (♂); Brunei, Labi, Bukit Teraja; NHML.
FIGURES: Beaver 1998b:287 (dorsal view of declivity).
DISTRIBUTION: ASIA: Brunei.
REFERENCES: (**tx**) Beaver 1998b:290.

Genus **Periommatus** Chapuis

Page 1102 ***abruptus*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:61.

Page 1102 *simillimus* Nunberg (synonym of ***angustior*** Schedl). Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:62.

Page 1102 ***artestrigatus*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:61.

Page 1103 ***bispinus*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:457.

Page 1104 ***inermis*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:458.

Page 1104 ***kreczmeri*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:61.

Page 1104 *camerunus* Strohmeyer (synonym of ***longicollis*** Chapuis). Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:457.

Page 1105 ***longus*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:61.

Page 1105 ***major*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:459.

Page 1105 ***mirabilis*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:61.

Page 1105 ***mkusii*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:459.

Page 1105 ***nigeriensis*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:61.

Page 1105 ***nitidicollis*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:459; Węgrzynowicz & Mokrzycki 1996:62.

Page 1106 ***piceus*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:459.

Page 1106 ***pseudocamerunus*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:62.

Page 1106 ***pseudoseverini*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:62.

Page 1106 ***robertsi*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:62.

Page 1106 ***severini*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:460.

Page 1106 ***signatus*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:460.

Page 1106 ***similis*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:460.

Page 1107 ***substriatus*** Strohmeyer. Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:460.

Page 1107 ***titschaki*** Schedlh. Add:
FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus).
REFERENCES: (**tx**) Kuschel, Leschen, & Zimmerman 2000.

Genus **Chaetastus** Nunberg

Page 1108 ***striatus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:85.

Genus **Cenocephalus** Nunberg

Page 1109 ***lalolaensis*** Nunberg. Add:
REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:61.

Genus **Mitosoma** Chapuis

Page 1110 ***chapuisi*** Strohmeyer. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:457.

Page 1110 ***hamatus*** (Nunberg). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:62.

Subfamily Platypodinae Erichson

TRIBE PLATYPODINI

Genus **Platypus** Herbst

Page 1113 **Platypus** Herbst. Add:
KEYS: Krivolutskaya 1996b:376 (to East Russian species).
FIGURES: Cibrián et al. 1995:385 (adult, gallery pattern, larva).
REFERENCES: **(cn)** Cibrián et al. 1995:384; Platt & Wardle 1995. **(ec)** Nakashima 1999. **(hb)** Cibrián et al. 1995:384. **(tx)** Krivolutskaya 1996b: 376; Wood 1993:272.

Page 1113 **Austroplatypus** Browne. Add:
NOTES: Listed as a synonym of ***Platypus*** Chapuis in 1992 catalog. Considered distinct genus by Beaver 1998a.
REFERENCES: **(tx)** Wood 1993:272; Beaver 1998a:65.

Page 1114 ***abietis*** Wood. Move to **Treptoplatypus**.

Page 1114 ***abruptulus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:90.

Page 1114 ***abruptus*** Sampson. Move to **Peroplatypus**.

Page 1114 ***acutidentatus*** Murayama. Move to **Dinoplatypus**.

Page 1114 ***adnexus*** Schedl. Move to **Epiplatypus**.

Page 1114 ***aduncus*** Chapuis. Move to **Dinoplatypus**.

Page 1115 ***aequalicinctus*** Schedl. Move to **Euplatypus**.

Page 1115 ***agathis*** Browne. Move to **Dinoplatypus**. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:91.

Page 1115 ***agnatus*** Schedl. Move to **Dinoplatypus**.

Page 1115 ***algosus*** Schedl. Move to **Dinoplatypus**.

Page 1115 ***alienus*** Schedl. Move to **Euplatypus**.

Page 1115 ***alternans*** Chapuis. Move to **Euplatypus**.

Page 1116 ***angustatulus*** Wood. Move to **Euplatypus**.

Page 1116 ***angustatus*** Chapuis. Move to **Euplatypus**.

Page 1116 ***angustioris*** Schedl. Move to **Euplatypus**.

Page 1116 ***annexus*** Wood. Move to **Epiplatypus**.

Page 1116 ***anthocephali*** Schedl. Move to **Dinoplatypus**.

Page 1116 ***aolai*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:91.

Page 1116 ***apicalis*** (White). Add:
FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus).
DISTRIBUTION: OCEANIA: Chatham Islands.
HOSTS: under bark of *Corynocarpus* sp.
REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**ds**) Emberson 1998:55. (**hb**) Kirkendall, Kent, & Raffa 1997. (**tx**) Kuschel, Leschen, & Zimmerman 2000.

Page 1117 ***applanatus*** Wood. Move to **Epiplatypus**.

Page 1117 ***araucariae*** Schedl. Move to **Euplatypus**.

Page 1117 ***areolatus*** Chapuis. Move to **Euplatypus**.

Page 1118 ***artecarinatus*** Schedl. Move to **Megaplatypus**.

Page 1118 ***assamelae*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:92.

Page 1118 ***attenatus*** Schedl. Move to **Megaplatypus**.

Page 1118 ***auricularis*** Chapuis. Move to **Megaplatypus**.

Page 1118 ***auritus*** Chapuis. Move to **Megaplatypus**.

Page 1118 ***australis*** Chapuis. Move to **Treptoplatypus**.

Page 1119 ***batesi*** Chapuis. Move to **Megaplatypus**.

Page 1119 ***bellus*** Schedl. Move to **Euplatypus**.

Page 1119 ***bicarinulatus*** Schedl. Add:
NOTES: Holotype in NHMW, not in NHML.
REFERENCES: (**an**) Lyal & King 1996. (**bv**) Lyal & King 1996. (**tx**) Beaver 1998c:188.

Page 1120 ***bicaudatus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:93.

Page 1120 ***bicornis*** Nunberg. Move to **Megaplatypus**.

Page 1120 ***bidens*** Schedl. Move to **Megaplatypus**.

Page 1120	***biflexuosus*** Schedl. Move to **Treptoplatypus**.
Page 1121	***bilobatus*** Strohmeyer. Move to **Euplatypus**.
Page 1121	***binodulus*** Chapuis. Move to **Megaplatypus**.
Page 1121	***biporus*** Blandford. Move to **Myoplatypus**.
Page 1121	***bispinatus*** Browne. Add: REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:94.
Page 1121	***biuncus*** Blandford. Move to **Dinoplatypus**.
Page 1122	***borneensis*** Browne. Add: REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:94.
Page 1122	***brasiliensis*** Nunberg. Move to **Epiplatypus**.
Page 1122	***brevicaudatus*** Nunberg. Move to **Megaplatypus**.
Page 1122	***brevicornis*** Wood. Move to **Myoplatypus**.
Page 1122	***brunneus*** Chapuis. Move to **Teloplatypus**.
Page 1122	***calamus*** Blandford. Move to **Dinoplatypus**.
Page 1123	***canaliculatus*** Schedl. Move to **Treptoplatypus**. Add: NOTES: Holotype in NHMW, not in NHML. REFERENCES: **(tx)** Beaver 1998c:188.
Page 1123	***caravanis*** Schedl. Move to **Megaplatypus**.
Page 1123	***carinifer*** Schedl. Move to **Megaplatypus**.
Page 1123	***carinifrons*** Schedl. Move to **Teloplatypus**.
Page 1124	***caviceps*** Broun. Move to **Treptoplatypus**. Add: REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997. **(hb)** Kirkendall, Kent, & Raffa 1997.
Page 1124	***cavus*** Strohmeyer. Move to **Dinoplatypus**.
Page 1124	***chevrolati*** Chapuis. Move to **Dinoplatypus**.
Page 1124	***chiriquensis*** Wood. Move to **Megaplatypus**.
Page 1125	***clunalis*** Wood. Move to **Platyscapulus**.
Page 1125	***cluniculus*** Wood. Move to **Platyscapulus**.
Page 1125	***clunis*** Wood. Move to **Platyscapulus**.
Page 1125	***collatatus*** Schedl. Move to **Teloplatypus**.
Page 1125	***complanatus*** Schedl. Move to **Epiplatypus**.
Page 1126	***compositus*** Say. Move to **Euplatypus**.
Page 1127	***conciliatus*** Schedl. Move to **Megaplatypus**.

Page 1127 ***concinnulus*** Blandford. Move to **Teloplatypus**.

Page 1127 ***connexus*** Wood. Move to **Myoplatypus**.

Page 1127 ***consequens*** Schedl. Move to **Megaplatypus**.

Page 1128 ***contextus*** Schedl. Move to **Euplatypus**.

Page 1128 ***contractus*** Chapuis. Move to **Megaplatypus**.

Page 1128 ***convexus*** Schedl. Move to **Platyphysus**.

Page 1128 ***coronatus*** Schedl. Move to **Euplatypus**.

Page 1128 ***costaricensis*** Schedl. Move to **Euplatypus**.

Page 1128 ***costipennis*** Schedl. Move to **Megaplatypus**.

Page 1129 ***cribricollis*** Blandford. Move to **Euplatypus**.

Page 1129 ***cupulatulus*** Schedl. Move to **Dinoplatypus**.

Page 1129 ***cupulatus*** Chapuis. Move to **Dinoplatypus**.

Page 1130 ***curtus*** Chapuis. Add:
REFERENCES: (**ds**) Krishnasamy et al. 1991.

Page 1130 ***curvidens*** Schedl. Move to **Megaplatypus**.

Page 1130 ***cuspidatus*** Schedl. Move to **Euplatypus**.

Page 1130 ***cylindrus*** (Fabricius). Add:
FIGURES: Dajoz 1998:453 (adult); Lombardero & Fernández de Ana Magán 1997:179 (adult).
DISTRIBUTION: ASIA: Iran (Giln). EUROPE: Latvia, Slovakia.
HOSTS: *Eucalyptus* sp., *Populus caspica*.
REFERENCES: (**an**) del Tio, Sorio, & Ocete 1995. (**bv**) Graser 1997; Kirkendall, Kent, & Raffa 1997; Lombardero & Fernández de Ana Magán 1997:184. (**cn**) Gogola et al. 1999; Hrašovec & Harapin 1999; Lombardero & Fernández de Ana Magán 1997; Sousa et al. 1995. (**ds**) Borumand 1998:94; Cassier et al. 1996; Delwaide 1998; Holecovà & Zach 1998; Kenward & Hall 1995; Lombardero & Fernández de Ana Magán 1997; Ponel 1995; Telnov et al. 1997:136; Winter 1992b. (**ec**) Babuder & Pohleven 1995b; Cassier et al. 1996; Dajoz 1998:452; Hedqvist 1998:79; Lombardero & Fernández de Ana Magán 1997:184; Ragazzi & Tiberi 1998; Sousa & Guedes 1999; Tiberi & Ragazzi 1998. (**hb**) Dajoz 1998:452; Kirkendall, Kent, & Raffa 1997; Lombardero & Fernández de Ana Magán 1997:184; Markalas & Kalapanida 1997; Soria et al. 1994:649.

Page 1132 *cylindriformis* Reitter (synonym of ***cylindrus*** (Fabricius)). Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:457.

Page 1133	***cymbiformis*** Roberts. Add: NOTES: All references under this species except the original description refer to *cylindriformis* Reitter. REFERENCES: (**tx**) Beaver 1998c:186.
Page 1133	***darlingtoni*** Reichardt. Move to **Megaplatypus**.
Page 1133	***dasycauda*** Browne. Add: REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:95.
Page 1133	***decens*** Sampson. Move to **Dinoplatypus**.
Page 1133	***deceptor*** Wood. Move to **Epiplatypus**.
Page 1133	***decorus*** Schedl. Move to **Euplatypus**.
Page 1134	***dentatus*** Dalman. Move to **Megaplatypus**.
Page 1134	*denticulatus* Browne. Move to ***gracilis*** as a synonym. Add: SYNONYMY: Beaver 1998c:182. REFERENCES: (**tx**) Beaver 1998c:182; Kikata, Hijii, & Kajimura 1994:96.
Page 1134	***deplanatus*** Wood. Move to **Epiplatypus**.
Page 1134	***desultor*** Schedl. Move to **Megaplatypus**.
Page 1134	***deyrollei*** Chapuis. Move to **Megaplatypus**.
Page 1135	***diductus*** Chapuis. Move to **Megaplatypus**.
Page 1135	***dignatus*** Schedl. Move to **Euplatypus**.
Page 1135	***dimidiatus*** Chapuis. Move to **Euplatypus**.
Page 1135	***dipterocarpi*** Browne. Add: REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:96.
Page 1135	***discicollis*** Chapuis. Move to **Megaplatypus**.
Page 1135	***discoidalis*** Schedl. Move to **Megaplatypus**.
Page 1135	***discolor*** Blandford. Move to **Epiplatypus**.
Page 1135	***dissimilis*** Chapuis. Move to **Euplatypus**.
Page 1136	***dissipabilis*** Schedl. Move to **Euplatypus**.
Page 1136	***distinguendis*** Schedl. Move to **Megaplatypus**.
Page 1136	***dolobratus*** Blandford. Move to **Megaplatypus**.
Page 1136	***dryobalanopsis*** Browne. Add: REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:97.

Page 1137 ***duriovorus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:98.

Page 1137 ***durus*** Schedl. Move to **Megaplatypus**.

Page 1137 ***dyerae*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:99.

Page 1137 ***efferatus*** Schedl. Move to **Euplatypus**.

Page 1137 ***egregius*** Schedl. Move to **Megaplatypus**.

Page 1137 ***elongatus*** Chapuis. Move to **Megaplatypus**.

Page 1137 ***emarginatulus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:100.

Page 1137 ***enixus*** Schedl. Move to **Teloplatypus**.

Page 1137 ***equadorensis*** Schedl. Move to **Megaplatypus**.

Page 1138 ***eugestus*** Wood. Move to **Epiplatypus**.

Page 1138 ***exaratus*** Blandford. Move to **Megaplatypus**.

Page 1138 ***excisus*** Chapuis. Move to **Teloplatypus**.

Page 1138 ***eximius*** Wood. Move to **Epiplatypus**.

Page 1139 ***exitialis*** Wood. Move to **Megaplatypus**.

Page 1139 ***exitiosus*** Schedl. Move to **Megaplatypus**.

Page 1139 ***falcatus*** Strohmeyer. Move to **Dinoplatypus**.

Page 1139 ***fallax*** Schedl. Move to **Peroplatypus**.

Page 1139 ***filaris*** Wood. Move to **Epiplatypus**.

Page 1139 ***flavicornis*** (Fabricius). Move to **Myoplatypus**.

Page 1140 ***flexiosus*** Schedl. Move to **Megaplatypus**.

Page 1140 ***forficula*** Chapuis. Move to **Dinoplatypus**.

Page 1141 ***fossulatus*** Chapuis. Move to **Megaplatypus**.

Page 1141 ***fragosus*** Schedl. Move to **Megaplatypus**.

Page 1142 ***fuscus*** Chapuis. Move to **Megaplatypus**. Add:
DISTRIBUTION: SOUTH AMERICA: Argentina (Schedl 1950:285).

Page 1142 ***geminatus*** Chapuis. Add:
REFERENCES: **(ec)** Sanderson et al. 1997.

Page 1142 ***gerstaeckeri*** Chapuis. Add:
REFERENCES: **(ds)** Waterhouse 1997:44,49.

Page 1143 ***godmani*** Blandford. Move to **Megaplatypus**.

Page 1143	*gotoi* Browne. Add: REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:101.
Page 1143	*gracilis* Broun. Add *denticulatus* Browne as a synonym. Add: REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**hb**) Kirkendall, Kent, & Raffa 1997.
Page 1143	*granarius* Schedl. Move to **Megaplatypus**.
Page 1143	*granosus* Browne. Add: REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:101.
Page 1144	*gregalis* Schedl. Move to **Megaplatypus**.
Page 1144	*guadeloupensis* Schedl. Move to **Epiplatypus**.
Page 1144	*haagi* Chapuis. Move to **Euplatypus**.
Page 1144	*hamatus* Blandford. Move to **Dinoplatypus**.
Page 1145	*hians* Chapuis. Move to **Euplatypus**.
Page 1145	*hintzi* Schaufuss. Move to **Euplatypus**.
Page 1146	*hirtellus* (Schedl). Add: DISTRIBUTION: ASIA: Thailand (Trang). REFERENCES: (**ds**) Beaver 1999c:32.
Page 1146	*holdhausi* Schedl. Move to **Megaplatypus**.
Page 1146	*humilis* Chapuis. Move to **Teloplatypus**.
Page 1147	*ignotus* Schedl. Move to **Megaplatypus**.
Page 1147	*imitatrix* Schedl. Move to **Platyscapulus**.
Page 1147	*immunis* Schedl. Move to **Euplatypus**.
Page 1147	*imporcatus* Blandford. Move to **Megaplatypus**.
Page 1147	*impressus* (Strohmeyer). Add: REFERENCES: (**tx**) Döbler & Gaedike 1995:458.
Page 1148	*inacessus* Schedl. Move to **Teloplatypus**.
Page 1148	*incompertus* Schedl. Move to **Austroplatypus**.
Page 1148	*indicus* Strohmeyer. Add: REFERENCES: (**tx**) Döbler & Gaedike 1995:458.
Page 1149	*insidiosus* Schedl. Move to **Megaplatypus**.
Page 1149	*insignatus* Schedl. Move to **Megaplatypus**.
Page 1149	*insularis* Strohmeyer. Add: REFERENCES: (**tx**) Węgrzynowicz & Mokrzycki 1996:62.
Page 1149	*inviolatus* Schedl. Move to **Megaplatypus**.

Page 1150	***iriani*** Browne. Add: REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:102.
Page 1150	***irregularis*** Schedl. Move to **Megaplatypus**.
Page 1150	***irrepertus*** Schedl. Move to **Megaplatypus**.
Page 1150	***irruptus*** Schedl. Move to **Megaplatypus**.
Page 1150	***jamaicensis*** Bright. Move to **Epiplatypus**.
Page 1150	***jansoni*** Chapuis. Add: REFERENCES: **(ds)** Waterhouse 1997:44,49.
Page 1150	***jelskii*** Nunberg. Move to **Megaplatypus**.
Page 1151	***keelungensis*** Browne. Add: REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:103.
Page 1151	***konincki*** Chapuis. Move to **Megaplatypus**.
Page 1151	***laevis*** Browne. Add: REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:104.
Page 1151	***lafertei*** Chapuis. Move to **Megaplatypus**.
Page 1152	***laminatus*** Schedl. Move to **Euplatypus**.
Page 1152	***laosi*** Schedl. Move to **Peroplatypus**.
Page 1152	***laticollis*** Chapuis. Move to **Platyphysus**.
Page 1152	***latidens*** Browne. Add: REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:105.
Page 1152	***latreillei*** Chapuis. Move to **Megaplatypus**.
Page 1152	***lawasensis*** Browne. Move to **Peroplatypus**.
Page 1152	***lepidus*** Chapuis. Move to **Dinoplatypus**.
Page 1153	***lewisi*** Blandford. Add: REFERENCES: **(ds)** Krivolutskaya 1996b:376,377. **(tx)** Krivolutskaya 1996b:376,377.
Page 1153	***limbatus*** Chapuis. Move to **Megaplatypus**.
Page 1154	***liraticus*** Wood. Move to **Megaplatypus**.
Page 1154	***liratus*** Blandford. Move to **Megaplatypus**.
Page 1154	***longicollis*** Browne. Move to **Dinoplatypus**. Add: REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:106.
Page 1154	***longior*** Wood. Move to **Euplatypus**.
Page 1154	***longius*** Wood. Move to **Euplatypus**.

Page 1154 ***longulus*** Chapuis. Move to **Euplatypus**.

Page 1155 ***lophopetali*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:106.

Page 1155 ***lunatellus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:107.

Page 1155 ***lunifer*** Schedl. Add:
DISTRIBUTION: ASIA: Thailand (Trang).
REFERENCES: **(ds)** Beaver 1999c:32.

Page 1155 ***luniger*** Motschulsky. Move to **Dinoplatypus**.

Page 1156 ***luridus*** Chapuis. Move to **Megaplatypus**.

Page 1156 ***madagascariensis*** Chapuis. Move to **Euplatypus**.

Page 1156 ***magnus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:109.

Page 1156 ***malaisei*** Schedl. Move to **Dinoplatypus**.

Page 1156 ***malignus*** Schedl. Move to **Megaplatypus**.

Page 1156 ***maniensis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:110.

Page 1157 ***marcidus*** Blandford. Move to **Teloplatypus**.

Page 1157 ***marginatus*** Chapuis. Move to **Megaplatypus**.

Page 1157 ***maritimus*** Schedl. Move to **Dinoplatypus**.

Page 1157 ***microlunatus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:111.

Page 1157 ***micrurus*** Schedl. Move to **Treptoplatypus**.

Page 1157 ***minusculus*** Schedl. Move to **Euplatypus**.

Page 1157 ***minor*** Browne. Move to **Crossotarsus**.

Page 1157 ***maritimus*** Schedl. Move to **Dinoplatypus**. Add:
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 1158 ***mulsanti*** Chapuis. Move to **Euplatypus**.

Page 1158 ***mutatus*** Chapuis. Move to **Megaplatypus**.

Page 1158 *sulcatus* Chapuis (synonym of ***mutatus*** Chapuis). Add:
FIGURES: Morrone 1996:63 (habitus).
REFERENCES: **(an)** Costilla & Venditti 1992. **(cn)** Bascialli et al. 1996; Costilla & Venditti 1992; Sousa & Luciano 1995; Sousa et al. 1995. **(hb)** Costilla & Venditti 1992; Sousa et al. 1995. **(tx)** Węgrzynowicz & Mokrzycki 1996:63.

Page 1159 ***nagakii*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:112.

Page 1159 ***navarrodeandradei*** Marelli. Move to **Megaplatypus**.

Page 1159 ***neglectus*** Schedl. Move to **Megaplatypus**.

Page 1159 ***nitens*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:113.

Page 1159 ***nitidicollis*** Schedl. Move to **Megaplatypus**.

Page 1160 ***noonadanae*** Browne. Move to **Dinoplatypus**.

Page 1160 ***nudatus*** Wood. Move to **Megaplatypus**.

Page 1160 ***nudus*** Schedl. Move to **Epiplatypus**.

Page 1160 ***obliquecaudatus*** Schedl. Move to **Peroplatypus**.

Page 1160 ***obliteratus*** Blandford. Move to **Megaplatypus**.

Page 1161 ***obtusus*** Chapuis. Move to **Platyphysus**.

Page 1161 ***occipitalis*** Chapuis. Move to **Megaplatypus**.

Page 1161 ***occipitis*** Wood. Move to **Platyscapulus**.

Page 1161 ***octodentatus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:114.

Page 1161 ***octospinosus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:115.

Page 1161 ***ohnoi*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:115.

Page 1161 ***olivieri*** Chapuis. Move to **Megaplatypus**.

Page 1161 ***omega*** Schedl. Move to **Dinoplatypus**.

Page 1162 ***opacicauda*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:116.

Page 1162 ***opacicaudulus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:117.

Page 1162 ***opacurus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:117.

Page 1162 ***orientalis*** (Strohmeyer). Add:
REFERENCES: (**tx**) Döbler & Gaedike 1995:457.

Page 1163 ***ornatus*** Schedl. Move to **Teloplatypus**.

Page 1163 ***otiosus*** Schedl. Move to **Euplatypus**.

Page 1163 *ovatus* Strohmeyer. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:62.

Page 1163 *oxyurus* Dufour. Move to **Treptoplatypus**. Add:
FIGURES: Dajoz 1998:453 (adult).
REFERENCES: **(cn)** Dajoz 1998:452. **(ds)** Cassier et al. 1996; Ponel 1995. **(ec)** Cassier et al. 1996; Thierry, Jean-Pierre, & Fiol 1995. **(hb)** Thierry, Jean-Pierre, & Fiol 1995. **(tx)** Böhme 1998:328.

Page 1164 *pallidipennis* Blandford. Move to **Teloplatypus**.

Page 1164 *pallidus* Chapuis. Move to **Dinoplatypus**.

Page 1164 *parallelus* (Fabricius). Move to **Euplatypus**.

Page 1166 *dejeani* Chapuis (synonym of *parallelus* (Fabricius)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:62.

Page 1168 *parvus* Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:118.

Page 1168 *patulus* Chapuis. Move to **Euplatypus**.

Page 1168 *perbinodulus* Schedl. Move to **Megaplatypus**.

Page 1168 *perbrevis* Browne. Move to **Dinoplatypus**. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:119.

Page 1169 *percomis* Schedl. Move to **Teloplatypus**.

Page 1169 *perdiligens* Schedl. Move to **Teloplatypus**.

Page 1169 *permarginatus* Schedl. Move to **Megaplatypus**.

Page 1169 *permimicus* Schedl. Move to **Euplatypus**.

Page 1169 *permodestus* Schedl. Move to **Megaplatypus**.

Page 1169 *pernudus* Schedl. Add:
NOTES: Moved to **Epiplatypus** and **Megaplatypus** in Wood 1993:279 & 281 (error). Correct genus?

Page 1169 *pertusus* Chapuis. Move to **Euplatypus**.

Page 1169 *peruanus* Nunberg. Move to **Megaplatypus**.

Page 1170 *pini* Hopkins. Move to **Euplatypus**.

Page 1170 *piniperda* Schedl. Move to **Dinoplatypus**.

Page 1170 *platypoides* (Browne). Move to **Perolatypus**.

Page 1170 *podocarpi* Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:120.

Page 1171 *porosus* Blandford. Move to **Euplatypus**.

Page 1171 ***porrectus*** Chapuis. Move to **Megaplatypus**.

Page 1171 ***pouteriae*** Wood. Move to **Platyphysus**.

Page 1171 ***prenexus*** Wood. Move to **Myoplatypus**.

Page 1172 ***pseudocupulatus*** Schedl. Move to **Dinoplatypus**.

Page 1172 ***pseudodignatus*** Schedl. Move to **Megaplatypus**.

Page 1172 ***pseudolongulus*** Schedl. Move to **Euplatypus**.

Page 1172 ***pseudoplicatus*** Schedl. Move to **Megaplatypus**.

Page 1173 ***pseudosindorae*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:120.

Page 1173 ***pulicaris*** Chapuis. Move to **Euplatypus**.

Page 1174 ***pumilis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:122.

Page 1174 ***quadridentatus*** (Olivier). Move to **Oxoplatypus**.

Page 1174 *disciporus* Chapuis (synonym of ***quadridentatus*** (Olivier)). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:62.

Page 1175 ***quadrispinis*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:122.

Page 1175 ***quaesitus*** Schedl. Move to **Megaplatypus**.

Page 1175 ***querceus*** Wood. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (**Chiapas**) (see Appendix).

Page 1175 ***querci*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:124.

Page 1175 ***quercivorus*** Murayama. Add:
HOSTS: *Pasania edulis*, *Quercus mongolica* var. *grosseserrata*.
REFERENCES: **(bv)** Hijii et al. 1991. **(cn)** Ishiyama 1993; Kinuura, Gotoh, & Ito 1998; Matsumoto 1955; Mizobuchi et al. 1996; Mori et al. 1995; Nobuchi 1990, 1994; Nunokawa 1993; Oogita et al. 1997; Saito 1959; Sato, Arai, & Kinuura 1993; Soma et al. 1997; Soné et al. 1995a, 1995b; Sueyoshi 1990. **(ec)** Hijii et al. 1991; Ito et al. 1998; Masuya, Kaneko, & Yamaoka 1998; Soné et al. 1995a, 1995b. **(hb)** Soné, Mori, & Ide 1998; Soné et al. 1995a. **(ms)** Kinuura, Gotoh, & Ito 1998.

Page 1175 ***quinquecostatus*** Chapuis. Move to **Megaplatypus**.

Page 1176 ***ramali*** Schedl. Move to **Megaplatypus**.

Page 1176 ***ratzeburgi*** Chapuis. Move to **Teloplatypus**.

Page 1176 ***raucus*** Schedl. Move to **Megaplatypus**.

Page 1176	***reichei*** Chapuis. Move to **Megaplatypus**.
Page 1176	***retusipennis*** Schedl. Move to **Peroplatypus**.
Page 1176	***roberti*** Chapuis. Move to **Euplatypus**.
Page 1177	***robustus*** Chapuis. Move to **Megaplatypus**.
Page 1177	***rufescens*** (Strohmeyer). Add: REFERENCES: **(tx)** Döbler & Gaedike 1995:460.
Page 1177	***ochthocosmus*** Roberts (listed as a synonym of ***rufescens*** (Schaufuss)). Reinstate as distinct species.
Page 1177	***rugosifrons*** Schedl. Move to **Euplatypus**.
Page 1177	***salvini*** Blandford. Move to **Megaplatypus**.
Page 1178	***santacruzensis*** Mutchler. Move to **Euplatypus**.
Page 1178	***schenklingi*** (Strohmeyer). Add: REFERENCES: **(tx)** Döbler & Gaedike 1995:460.
Page 1178	***schmidti*** Chapuis. Move to **Megaplatypus**.
Page 1179	***secus*** Wood. Move to **Epiplatypus**.
Page 1179	***segnis*** Chapuis. Move to **Euplatypus**.
Page 1179	***semiermis*** Schedl. Add: DISTRIBUTION: ASIA: Thailand. REFERENCES: **(ds)** Beaver 1999c:33.
Page 1180	***semisulcatus*** Schedl. Move to **Peroplatypus**.
Page 1180	***senexus*** Wood. Move to **Myoplatypus**.
Page 1180	***setaceus*** Chapuis. Add: REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:63.
Page 1180	***severini*** Blandford. Add: FIGURES: Krivolutskaya 1996b:377 (habitus, apex of elytra); Nakashima 1999:13 (adult, larva, pupa), 35 (mycangia). REFERENCES: **(ds)** Krivolutskaya 1996b:376. **(ec)** Nakashima 1999. **(tx)** Krivolutskaya 1996b:376.
Page 1180	***sexcostatus*** Chapuis. Move to **Megaplatypus**.
Page 1181	***seydeli*** (Nunberg). Add: REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:63.
Page 1181	***simpliciformis*** Wood. Add: NOTES: Moved to **Euplatypus** and **Megaplatypus** in Wood 1993:280 (error). Correct genus?
Page 1182	***sindorae*** Browne. Add: REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:124.

Page 1182 ***sinuosus*** Chapuis. Move to **Euplatypus**.

Page 1182 ***sobrinus*** Schedl. Move to **Megaplatypus**.

Page 1182 ***solidulus*** Browne. Move to **Treptoplatypus**.

Page 1182 ***solidus*** Walker. Move to **Treptoplatypus**.

Page 1183 *solidus obtusus* Chapuis (synonym of ***solidus*** Walker). Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:63.

Page 1184 ***solomonicus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:126.

Page 1184 ***solutus*** Schedl. Move to **Euplatypus**.

Page 1184 ***spectus*** Wood. Move to **Epiplatypus**.

Page 1184 ***spinosus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:127.

Page 1184 ***spinulosus*** (Strohmeyer). Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:460.

Page 1185 ***striatopennis*** Schedl. Move to **Teloplatypus**.

Page 1185 ***striatus*** Chapuis. Move to **Euplatypus**.

Page 1185 ***suavifer*** Schedl. Move to **Megaplatypus**.

Page 1185 ***subcuratus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:127.

Page 1186 ***subgranosus*** Schedl. Add:
FIGURES: Calder 1989:1261 (alimentary canal), 1265 (central nervous system), 1990:499 (reproductive system), 504 (reproductive system).
REFERENCES: **(an)** Calder 1989, 1990. **(bv)** Kirkendall, Kent, & Raffa 1997. **(hb)** Kirkendall, Kent, & Raffa 1997.

Page 1186 ***subgranulosa*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:128.

Page 1186 ***subitarius*** Schedl. Move to **Teloplatypus**.

Page 1186 ***subnitens*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:129.

Page 1186 ***suboblitaratus*** Schedl. Move to **Megaplatypus**.

Page 1187 ***subsulcatus*** Chapuis. Move to **Megaplatypus**.

Page 1187 ***subtrunctatus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:130.

Page 1187 ***suffodiens*** Sampson. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:460.

Page 1187 ***suzukii*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:131.

Page 1187 ***takeharai*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:132.

Page 1187 *lunatulus* Browne (synonym of ***tayabasi*** Schedl). Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:108.

Page 1188 ***tenuis*** Murayama. Move to **Dinoplatypus**.

Page 1188 ***tenuissimus*** Schedl. Move to **Dinoplatypus**.

Page 1188 ***tetracerus*** Beeson. Move to **Dinoplatypus**.

Page 1188 ***tiriosensis*** Reichardt. Move to **Megaplatypus**.

Page 1188 ***tragus*** Schedl. Move to **Euplatypus**.

Page 1188 ***transformis*** Schedl. Add:
HOSTS: *Acacia mangium*.
REFERENCES: (**ds**) Ho & Maznah 1995.

Page 1189 ***tricuspidatus*** Schedl. Move to **Euplatypus**.

Page 1189 ***truncaticauda*** Schedl. Move to **Peroplatypus**.

Page 1189 ***truncatigranosus*** Schedl. Move to **Peroplatypus**.

Page 1189 ***truncatipennis*** Schedl. Move to **Peroplatypus**.

Page 1189 ***trilobipennis*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:132.

Page 1189 ***triplurus*** Browne. Move to **Dinoplatypus**. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:133.

Page 1189 ***trispinatulus*** Schedl. Move to **Euplatypus**.

Page 1189 ***trispinatus*** Schedl. Move to **Euplatypus**.

Page 1190 ***truncaturus*** Browne. Add:
REFERENCES: (**tx**) Kikata, Hijii, & Kajimura 1994:134.

Page 1190 ***truncatus*** Chapuis. Move to **Euplatypus**.

Page 1190 ***tuberculatus*** Chapuis. Move to **Megaplatypus**.

Page 1190 ***tuberculosus*** Strohmeyer. Add:
REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**hb**) Kirkendall, Kent, & Raffa 1997.

Page 1190 ***umbonatus*** Blandford. Move to **Megaplatypus**.

Page 1190 ***umbraticus*** Schedl. Move to **Dinoplatypus**.

Page 1190 ***uncatus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:134.

Page 1190 ***uncinatus*** Blandford. Move to **Dinoplatypus**.

Page 1191 ***ursinus*** Schedl. Move to **Megaplatypus**.

Page 1191 ***ursus*** Schedl. Move to **Megaplatypus**.

Page 1191 ***ustulatus*** Chapuis. Move to **Teloplatypus**.

Page 1192 ***vagus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:135.

Page 1192 ***vegestus*** Wood. Move to **Epiplatypus**.

Page 1193 ***vicinus*** Blandford. Move to **Euplatypus**.

Page 1193 ***vonfaberi*** Reichardt. Move to **Platyphysus**.

Page 1194 ***wilsoni*** Swaine. Move to **Treptoplatypus**.

Add species: ***ochthocosmus*** Roberts. Reinstate as distinct species. Add:
HOSTS: *Ochthocosmus africans*.
REFERENCES: **(tx)** Beaver & Löyttyniemi 1989:288.

quadrilobus Blandford. From **Neotrachyostus**. Add:
REFERENCES: **(tx)** Wood 1993:273.

sulcatulus (Browne). From **Cylindropalpus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

taxicornis Schedl. From **Treptoplatypus**. Add:
REFERENCES: **(tx)** Wood 1993:272.

Genus **Treptoplatypus** Schedl

Page 1194 **Treptoplatypus** Schedl. Add:
REFERENCES: **(tx)** Wood 1993:272.

Page 1195 ***taxicornis*** (Schedl). Move to **Platypus**.
REFERENCES: **(tx)** Wood 1993:272.

Add species: ***abietis*** (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:272.

artesolidus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

australis (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:272.

biflexuosus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:272.

canaliculatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

caviceps (Broun). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

franciai (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

hirtus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

micrurus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:272.

oxyurus (Dufour). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

pasohensis (Schedl). From **Baiocis**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

sandakanensis (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

solidulus (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184; Kikata, Hijii, & Kajimura 1994:125.

solidus (Walker). From **Platypus**. Add:
FIGURES: Chey 1996:52 (habitus).
REFERENCES: **(cn)** Chey 1996:52. **(tx)** Wood 1993:272.

wilsoni (Swaine). From **Platypus**. Add:
REFERENCES: **(ds)** Shore & McLean 1995. **(tx)** Wood 1993:272.

Genus **Crossotarsus** Chapuis

Page 1195 **Crossotarsus** Chapuis. Add:
KEYS: Krivolutskaya 1996b:374 (to East Russian species).
REFERENCES: **(ec)** Nakashima 1999. **(tx)** Krivolutskaya 1996b:374; Wood 1993:273.

Page 1195 ***armipennis*** Lea. Add:
HOSTS: *Eucalyptus maculata*.
REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997. **(ec)** May 1997. **(hb)** Kirkendall, Kent, & Raffa 1997. **(tx)** Węgrzynowicz & Mokrzycki 1996:60.

Page 1196 ***barbatus*** Chapuis. Add:
REFERENCES: **(ec)** Darling & Roberts 1999.

Page 1197 ***cliens*** (Schedl). Add:
FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus).
REFERENCES: **(tx)** Kuschel, Leschen, & Zimmerman 2000.

Page 1198 ***externedentatus*** (Fairmaire). Add:
FIGURES: Paulin 1998:182 (habitus).
HOSTS: *Heritiera littoralis*.
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(ds)** Paulin 1998:180; Waterhouse 1997:42,47,52. **(hb)** Madoffe & Bakke 1995.

Page 1199 *heritierae* Stebbing (synonym of ***externedentatus*** (Fairmaire)). Add:
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997.

Page 1199 *saundersi* Chapuis (synonym of ***externedentatus*** (Fairmaire)). Add:
REFERENCES: **(ec)** Veenakumari, Mohanraj, & Bandyopadhyay 1997. **(tx)** Węgrzynowicz & Mokrzycki 1996:61.

Page 1200 ***flavomaculatus*** Strohmeyer. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:458.

Page 1200 ***formosanus*** Strohmeyer. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:458.

Page 1200 ***horni*** Schedl. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:457.

Page 1201 ***inaequidens*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:86.

Page 1201 ***keyensis*** Strohmeyer. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:459.

Page 1201 ***lecontei*** Chapuis. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:61.

Page 1202 ***majusculus*** Sampson. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:459.

Page 1202 ***minax*** (Walker). Add:
FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus).
REFERENCES: **(tx)** Kuschel, Leschen, & Zimmerman 2000.

Page 1203 ***mniszechi*** Chapuis. Add:
FIGURES: Calder 1989:1261 (alimentary canal), 1265 (central nervous system).
REFERENCES: **(an)** Calder 1989.

Page 1203 ***niponicus*** Blandford. Add:
FIGURES: Krivolutskaya 1996b:376 (habitus); Nakashima 1999:13 (fungus, immature stages).
REFERENCES: **(an)** Lyal & King 1996. **(bv)** Lyal & King 1996. **(ds)** Krivolutskaya 1996b:376. **(ec)** Nakashima 1999. **(tx)** Krivolutskaya 1996b:376.

Page 1204 ***piceus*** Chapuis. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:61.

Page 1205	***quadricaudatus*** (Strohmeyer). Add: REFERENCES: (**tx**) Döbler & Gaedike 1995:458.
Page 1205	***schedli*** Browne. Add: DISTRIBUTION: ASIA: Thailand (Trang). REFERENCES: (**ds**) Beaver 1999c:30.
Page 1205	***simplex*** Murayama. Add: REFERENCES: (**ds**) Krivolutskaya 1996b:376. (**tx**) Krivolutskaya 1996b:376.
Page 1206	***squamulatus*** Chapuis. Add: REFERENCES: (**ec**) Veenakumari, Mohanraj, & Bandyopadhyay 1997.
Page 1209	***wilmoti*** (Stebbing). Add: REFERENCES: (**cn**) Thakur 1999.
Add species:	***minor*** (Browne). From **Platypus**. Add: REFERENCES: (**tx**) Beaver 1998c:183; Kikata, Hijii, & Kajimura 1994: 111.

Genus **Carchesiopygus** Schedl

Page 1210	***multidentatus*** (strohmeyer). Add: REFERENCES: (**tx**) Döbler & Gaedike 1995:459.

Genus **Trachyostus** Schedl

Page 1211	**Trachyostus** Schedl. Add: REFERENCES: (**tx**) Wood 1993:273.
Page 1211	***ater*** (Strohmeyer). Add: REFERENCES: (**tx**) Döbler & Gaedike 1995:457.
Page 1211	***aterrimus*** (Schaufuss). Add: REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**hb**) Kirkendall, Kent, & Raffa 1997.
Page 1211	*vastus* Strohmeyer (synonym of ***aterrimus*** (Schaufuss)). Add: REFERENCES: (**tx**) Döbler & Gaedike 1995:461.
Page 1211	***ghanaensis*** Schedl. Add: REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**cn**) Foahom 1996. (**hb**) Kirkendall, Kent, & Raffa 1997.
Page 1212	*punctatus* Strohmeyer (synonym of ***nobilis*** (Schaufuss)). Add: REFERENCES: (**tx**) Döbler & Gaedike 1995:459.
Page 1212	***schaufussi*** (Strohmeyer). Add: FIGURES: Kuschel, Leschen, & Zimmerman 2000:776 (habitus). REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**hb**) Kirkendall, Kent, & Raffa 1997. (**tx**) Kuschel, Leschen, & Zimmerman 2000.

Page 1212 ***ugandensis*** Nunberg (synonym of ***schaufussi*** (Strohmeyer)). Add:
REFERENCES: (tx) Węgrzynowicz & Mokrzycki 1996:63.

Page 1212 ***similis*** Nunberg. Add:
REFERENCES: (tx) Węgrzynowicz & Mokrzycki 1996:63.

Page 1212 ***tomentosus*** (Strohmeyer). Add:
REFERENCES: (tx) Döbler & Gaedike 1995:461.

Genus **Neotrachyostus** Browne

Page 1213 **Neotrachyostus** Browne. Add:
REFERENCES: (tx) Wood 1993:273.

Page 1213 ***dohrni*** (Chapuis). Add:
REFERENCES: (tx) Węgrzynowicz & Mokrzycki 1996:62.

Page 1214 ***quadrilobus*** Blandford. Move to **Platypus**.

Genus **Platyscapulus** Schedl

Page 1214 **Platyscapulus** Schedl. Add:
REFERENCES: (tx) Wood 1993:274.

Add species: ***clunalis*** (Wood). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:279.

cluniculus (Wood). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:279.

clunis (Wood). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:279.

imitatrix (Schedl). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:279.

occipitis (Wood). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:279.

Genus **Baiocis** Browne

Page 1216 **Baiocis** Browne. Add:
REFERENCES: (tx) Wood 1993:275.

Page 1216 ***angusticeps*** (Schedl). Add:
NOTES: Specimen labeled as "Holotypus" by Schedl is a syntype.
REFERENCES: (tx) Beaver 1998c:188.

Page 1217 ***solomonicus*** Browne. Add:
REFERENCES: (tx) Kikata, Hijii, & Kajimura 1994:85.

Genus **Cylindropalpus** Strohmeyer

Page 1217 **Cylindropalpus** Strohmeyer. Add:
REFERENCES: **(tx)** Wood 1993:276.

Page 1217 ***affinis*** Strohmeyer. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:456.

Page 1218 *africanus* Strohmeyer (synonym of ***auricomans*** (Schaufuss)). Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:456.

Page 1219 ***sulcatulus*** Browne. Move to **Platypus**.

Genus **Triozastus** Schedl

Page 1219 **Triozastus** Schedl. Add:
REFERENCES: **(tx)** Wood 1993:276.

Genus **Mesoplatypus** Strohmeyer

Page 1221 **Mesoplatypus** Strohmeyer. Add:
REFERENCES: **(tx)** Wood 1993:276.

Page 1221 ***bilobatus*** Nunberg. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:61.

Genus **Doliopygus** Schedl

Page 1223 **Doliopygus** Schedl. Add:
REFERENCES: **(ec)** Nakashima 1999. **(tx)** Wood 1993:277.

Page 1224 ***bidentatus*** (Strohmeyer). Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:457.

Page 1226 *bugiriensis* Nunberg (synonym of ***chapuisi*** (Duvivier)).
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:61.

Page 1227 ***conradti*** (Strohmeyer). Add:
REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997. **(hb)** Kirkendall, Kent, & Raffa 1997. **(tx)** Döbler & Gaedike 1995:457; Węgrzynowicz & Mokrzycki 1996:61.

Page 1228 ***dentiventris*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:88.

Page 1228 ***dubius*** (Sampson). Add:
HOSTS: *Terminalia superba*.
REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997. **(cn)** Foahom 1996. **(hb)** Kirkendall, Kent, & Raffa 1997.

Page 1229 ***exilis*** (Chapuis). Add:
HOSTS: *Khaya nyasica.*
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(cn)** Madoffe & Bakke 1996. **(hb)** Madoffe & Bakke 1995, 1996.

Page 1233 *unispinosus* Schedl 1936 (listed as synonym of ***mimicus*** (Schedl)). Remove from synonymy.

Page 1238 ***serratus*** (Strohmeyer). Add:
HOSTS: *Khaya nyasica, Milicia excelsa.*
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(cn)** Madoffe & Bakke 1996. **(hb)** Madoffe & Bakke 1995, 1996. **(tx)** Döbler & Gaedike 1995: 460.

Page 1239 ***subserratus*** Browne. Add:
REFERENCES: **(tx)** Kikata, Hijii, & Kajimura 1994:89.

Add species: ***unispinosus*** Schedl 1936. Remove from synonymy with ***mimicus*** (Schedl). Add:
NOTES: Recognized as distinct species by Roberts (1970:464) and Browne (1972:119).
REFERENCES: **(tx)** Beaver 1998c:187; Browne 1972:119; Roberts 1970:464.

Genus **Dendroplatypus** Browne

Page 1240 ***impar*** (Schedl). Add:
REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997. **(hb)** Kirkendall, Kent, & Raffa 1997.

Genus **Austroplatypus** Browne

Add genus: **Austroplatypus** Browne. Remove from synonymy with **Platypus**. Add:
NOTES: Listed as a synonym of **Platypus** in 1992 catalog. Regarded as distinct genus by Beaver 1998a:65.
REFERENCES: **(tx)** Wood 1993:272; Beaver 1998a:65.

Add species: ***incompertus*** Schedl. From **Platypus**. Add:
REFERENCES: **(bv)** Kirkendall, Kent, & Raffa 1997. **(hb)** Kirkendall, Kent, & Raffa 1997.
(Type species of **Austroplatypus**).

Genus **Peroplatypus** Wood

Add genus: **Peroplatypus** Wood 1993:272. Type species: *Platypus truncatipennis* Schedl, original designation.

Add species: ***abruptus*** (Sampson). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

capito (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

fallax (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

laosi (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

lawasensis (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

obliquecaudatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

platypoides (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:273.

retusipennis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

semisulcatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

truncatellus (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

truncaticauda (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:273.

truncatigranosus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:273.

truncatipennis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

Genus **Dinoplatypus** Wood

Add genus: **Dinoplatypus** Wood 1993:273. Type species: *Platypus cupulatus* Chapuis, original designation.

Add species: ***acutidentatus*** (Murayama). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

aduncus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

agathis (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

agnatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

algosus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

anthocephali (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

biuncus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

brevis (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

calamus (Blandford). From **Platypus**. Add:
REFERENCES: **(bv)** Hijii et al. 1991. **(cn)** Mizobuchi et al. 1996; Oogita et al. 1997; Soma et al. 1997. **(ec)** Hijii et al. 1991. **(tx)** Wood 1993:279.

cavus (Strohmeyer). From **Platypus**. Add:
REFERENCES: **(tx)** Döbler & Gaedike 1995:457; Wood 1993:279.

chevrolati (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

cupulatulus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

cupulatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

decens (Sampson). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

falcatus (Strohymeyer). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

forficula (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

hamatus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

javanus (Browne). From **Platypus**. Add:
DISTRIBUTION: ASIA: Thailand (Chiangmai).
REFERENCES: **(ds)** Beaver 1999c:30. **(tx)** Beaver 1998c:184.

lepidus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:62; Wood 1993:279.

longicollis (Browne). From **Platypus**. Add:
REFERENCES: **(tx)** Beaver 1998c:184.

luniger (Motschulsky). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

malaisei (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

maritimus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

noonadanae (Browne). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

omega (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

pallidus (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

perbrevis (Browne). From **Platypus**. Add:
REFERENCES: (**tx**) Beaver 1998c:184.

piniperda (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

pseudocupulatus (Schedl). From **Platypus**. Add:
FIGURES: Chey 1996:54 (♀ habitus).
REFERENCES: (**cn**) Chey 1996:54. (**tx**) Wood 1993:279.

tenuis (Murayama). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

tenuissimus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

tetracerus (Beeson). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

triplurus (Browne). From **Platypus**. Add:
DISTRIBUTION: ASIA: Thailand (Chiangmai).
REFERENCES: (**ds**) Browne 1999c:31. (**tx**) Beaver 1998c:184.

umbraticus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

uncinatus (Blandford). From **Platypus**. Add:
REFERENCES: (**ec**) Veenakumari, Mohanraj, & Bandyopadhyay 1997. (**tx**) Wood 1993:279.

Genus **Myoplatypus** Wood

Add genus: **Myoplatypus** Wood 1993:274. Type species: *Bostrichus flavicornis* Fabricius, original designation.

Add species: ***biporus*** (Blandford). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:279.

brevicornis (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

connexus (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

flavicornis (Fabricius). From **Platypus**. Add:
REFERENCES: **(bv)** Nation, Foltz, & Phillips 1996. **(cn)** Syme & Saucier 1995. **(ds)** Peck & Thomas 1998:161. **(tx)** Wood 1993:279.

prenexus (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

senexus (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

Genus **Oxoplatypus** Wood

Add genus: **Oxoplatypus** Wood 1993:274. Type species: *Scolytus quadridentatus* Olivier, original designation.

Add species: ***quadridentatus*** (Olivier). From **Platypus**. Add:
REFERENCES: **(ds)** Peck & Thomas 1998:161. **(tx)** Wood 1993:279.

Genus **Platyphysus** Wood

Add genus: **Platyphysus** Wood 1993:274. Type species: *Platypus obtusus* Chapuis, original designation.

Add species: ***convexus*** (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

laticollis (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

obtusus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

pouteriae (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

vonfaberi (Reichardt). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

Genus **Megaplatypus** Wood

Add genus: **Megaplatypus** Wood 1993:275. Type species: *Platypus dentatus* Dalman, original designation.

Add species: ***artecarinatus*** (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

attentus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

auricularis (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

auritus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

batesi (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

bicornis (Numberg). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

bidens (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

binodulus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

brevicaudatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

caravanis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

carinifer (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

chiriquensis (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:279.

conciliatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

consequens (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

contractus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

costipennis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

curvidens (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

darlingtoni (Reichardt). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

dentatus (Dalman). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

desultor (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

deyrollei (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

diductus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

discicollis (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

discoidalis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

distinguendis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

dolobratus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

durus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

egreguis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

elongatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

equadorensis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

exaratus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

exitialis (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

exitiosus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

flexiosus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

fossulatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

fragosus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

fuscus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

godmani (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

granarius (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

gregalis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

holdhausi (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

ignotus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

imporcatus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

insidiosus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

insignatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

inviolatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

irregularis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

irrepertus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

irruptus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

jelskii (Nunberg). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

konincki (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

lafertei (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:62; Wood 1993: 280.

latreillei (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

limbatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

liraticus (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

liratus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

luridus (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

malignus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

marginatus (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

mutatus (Chapuis). From **Platypus**. Add:
HOSTS: *Populus deltoides*, "citrus", "avocado", *Salix* spp.
REFERENCES: (**bv**) Kirkendall, Kent, & Raffa 1997. (**hb**) Kirkendall, Kent, & Raffa 1997. (**tx**) Wood 1993:280.

navarrodeandradei (Marelli). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

neglectus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

nitidicollis (Scjhedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

nudatus (Wood). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

obliteratus (Blandford). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

occipitalis (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

olivieri (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

perbinodulus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

permarginatus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

permodestus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

peruanus (Nunberg). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

porrectus (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

pseudodignatus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

pseudoplicatus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

quaesitus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

quinquecostatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

ramali (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

raucus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

reichei (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

robustus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

salvini (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

schmidt (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

sexcostatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

sobrinus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

suavifer (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

suboblitaratus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

subsulcatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

tiriosensis (Reichardt). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

tuberculatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

umbonatus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

ursinus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

ursus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

Genus **Euplatypus** Wood

Add genus: **Euplatypus** Wood 1993:275. Type species: *Bostrichus parallelus* Fabricius, original designation.

Add species: ***aequalicinctus*** (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

alienus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

alternans (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

angustatulus (Wood). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

angustatus (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

angustioris (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

araucariae (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

areolatus (Chapuis). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

bellus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

bilobatus (Strohymeyer). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

compositus (Say). From **Platypus**. Add:
REFERENCES: (**ds**) Peck & Thomas 1998:161. (**tx**) Wood 1993:280.

contextus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

coronatus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

costaricensis (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

cribricollis (Blandford). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

cuspidatus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

decorus (Schedl). From **Platypus**. Add:
REFERENCES: (**tx**) Wood 1993:280.

dignatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

dimidiatus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

dissimilis (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

dissipabilis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

efferatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

haagi (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

hians (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

hintzi (Schaufuss). From **Platypus**. Add:
HOSTS: *Cedrela mexicana*, *Khaya nyasica*, *Milicia excelsa*.
REFERENCES: **(bv)** Madoffe & Bakke 1995. **(cn)** Madoffe & Bakke 1996. **(hb)** Madoffe & Bakke 1995, 1996. **(tx)** Wood 1993:280.

immunis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

laminatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

longior (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

longius (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

longulus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

madagascariensis (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:62; Wood 1993: 280.

minusculus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

mulsanti (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

otiosus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

parallelus (Fabricius). From **Platypus**. Add:
FIGURES: Chey 1996:56 (♀ habitus).

DISTRIBUTION: ASIA: Brunei, Thailand (Chiangmai, Trang).
HOSTS: *Acacia mangium*, *Brosimum* spp., *Croton* spp., *Ficus* spp., *Gmelina arborea*, *Lonchocarpus rugosus*, *Metopium brownei*, *Qualea brevipedicellata*, *Quercus* spp.
REFERENCES: **(bv)** Burgos 1998. **(cn)** Chey 1996:56. **(ds)** Beaver 1999c:31; Cibrián et al. 1995:384; Ho & Maznah 1995; Mezzomo et al. 1998:84; Peck & Thomas 1998:161. **(ec)** Sanderson et al. 1996, 1997. **(hb)** Abreu & Bandeira 1992. **(tx)** Wood 1993:275,280.

patulus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

permimicus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

pertusus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

pini (Hopkins). From **Platypus**. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Michoacán, Morelos).
REFERENCES: **(ds)** Cibrián et al. 1995:384. **(tx)** Wood 1993:280.

porosus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

pseudolongulus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

pulicaris (Chapuis). From **Platypus**. Add:
DISTRIBUTION: NORTH AMERICA: **Dominican Republic** (see Appendix).
REFERENCES: **(tx)** Wood 1993:280.

roberti (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

rugosifrons (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

santacruzensis (Mutchler). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:280.

segnis (Chapuis). From **Platypus**. Add:
DISTRIBUTION: NORTH AMERICA: Mexico (Campeche, San Luis Potosí, Tabasco).
HOSTS: *Carya illinoensis*.
REFERENCES: **(ds)** Cibrián et al. 1995:384. **(tx)** Wood 1993:280.

sinuosus (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Węgrzynowicz & Mokrzycki 1996:63; Wood 1993: 280.

solutus (Chapuis). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

striatus (Chapuis). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

tragus (Schedl). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

tricuspidatus (Schedl). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

trispinatulus (Schedl). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

trispinatus (Schedl). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

truncatus (Chapuis). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

vicinus (Blandford). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

Genus **Epiplatypus** Wood

Add genus: **Epiplatypus** Wood 1993:275. Type species: *Platypus desceptor* Wood, original designation.

Add species: ***adnexus*** (Schedl). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

annexus (Wood). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:276.

applanatus (Wood). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:276.

brasiliensis (Nunberg). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

complanatus (Schedl). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

deceptor (Wood). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

deplanatus (Wood). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:276.

discolor (Blandford). From **Platypus**. Add:
REFERENCES: (tx) Wood 1993:281.

eugestus (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:276.

eximus (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:276.

filaris (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:276.

guadeloupensis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

jamaicensis (Bright). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:276.

nudus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

secus (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:276.

spectus Wood. From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:276.

vegestus (Wood). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:276.

Genus **Teloplatypus** Wood

Add genus: **Teloplatypus** Wood 1993:275. Type species: *Platypus concinnus* Blandford, original designation.

Add species: ***brunneus*** (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

carinifrons (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

collatatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

concinnulus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

enxius (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

excisus (Chapuis). From **Platypus**. Add:
DISTRIBUTION: NORTH AMERICA: **Dominican Republic** (see Appendix).
REFERENCES: **(tx)** Wood 1993:281.

humilis (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

inacessus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

marcidus (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

ornatus (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

pallidipennis (Blandford). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

percomis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

perdiligens (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

ratzeburgi (Chapuis). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

striatopennis (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

subitarius (Schedl). From **Platypus**. Add:
REFERENCES: **(tx)** Wood 1993:281.

ustulatus (Chapuis). From **Platypus**. Add:
DISTRIBUTION: NORTH AMERICA: Dominican Republic.
HOSTS: *Acacia mangium*.
REFERENCES: **(cn)** Haack 1998b. **(ds)** Haack 1998b.

Subfamily Carphodicticinae Wood

Page 437 Tribe Carphodicticini Wood. From Scolytidae.
REFERENCES: **(tx)** Thompson 1992.

Genus **Carphodicticus** Wood

Page 437 ***cristatus*** Wood. Add:
DISTRIBUTION: SOUTH AMERICA: **Brazil, Peru** (see Appendix).

Genus **Craniodicticus** Blandford

Page 437 **Craniodicticus** Blandford. Add:
KEYS: Beaver 1999b.
REFERENCES: **(tx)** Thompson 1992:884,886; Beaver 1999b.

Page 437 ***minor*** Eggers. Add:
FIGURES: Beaver 1999b:201 (elytral apex).
REFERENCES: **(tx)** Beaver 1999b.

Page 437 ***mucronatus*** Blandford. Add:
REFERENCES: **(tx)** Beaver 1999b.

Add species: ***sabahensis*** Beaver 1999b:202. Holotype ♂; Malaysia: Sabah, Sipitang, Mendolong; ZMLU.
FIGURES: Beaver 1999b:201 (elytral apex).
DISTRIBUTION: ASIA: Malaysia (Sabah).
REFERENCES: **(tx)** Beaver 1999b:202.

Add tribe: **PHYLLOPLATYPODINI** Kato 1998.
NOTES: This tribe and included genus are almost certainly members of the tribe Cossonini in the Curculionidae.
REFERENCES: **(tx)** Kato 1998; Kuschel, Leschen, & Zimmerman 2000.

Add genus: **Phylloplatypus** Kato 1998:72. Type species: *Phylloplatypus pandani* Kato, original designation.
REFERENCES: **(tx)** Kato 1998:72; Kuschel, Leschen, & Zimmerman 2000.

Add species: ***pandani*** Kato 1998:72. Holotype (♂); Halfway up Mt. Chibusa, Haha Island, Japan; Biological Laboratory, Yoshida College, Kyoto University, Kyoto.
FIGURES: Kato 1998.
DISTRIBUTION: ASIA: Bonin Islands (Chichi, Ani, and Haha Islands).
HOSTS: Leaves of *Pandanus boninensis*.
REFERENCES: **(ds)** Kato 1998. **(hb)** Kato 1998. **(tx)** Kato 1998.

Host List for Scolytidae

A

Abies webbiana.
Indocryphalus intermedius.

Acacia bonariensis.
Chramesus spinosus, Hylocurus intermedius.

Acacia cavenia.
Pseudochramesus vianai.

Acacia mangium.
Arixyleborus granulifer, A. rugosipes, A. suturalis, Coccotrypes carpophagus, C. longior, C. rhizophorae, C. vulgaris, Coptodryas perparva, Hypocryphalus perminimus, Hypothenemus eruditus, H. obscurus, H. setosus, Xyleborinus exiguus, Xyleborus affinis, X. apertus, X. perforans, Xylosandrus compactus, Xylosandrus crassiusculus.

Acalypha wilkesiana.
Hypothenemus seriatus.

Acer saccharum.
Dryoxylon onoharaensis.

Acer sp.
Indocryphalus majus.

Alnus acuminata.
Corthylus nudus.

Alternanthera philoxeroides var. **obtusifolia.**
Scolytodes bruchi.

Amelanchier denticulata.
Corthylus fuscus.

Araucaria angustifolia.
Ambrosiodmus catharinensis, Bothrosternus suturalis, Cnesinus dividuus, Corthylus papulans, C. schaufussi, Pagiocerus punctatus, Phloeotribus argentinensis, P. cylindricus, Xyleborus ferrugineus, X. neivai, X. squamulatus, X. volvulus, Xyleborinus linearicollis, X. sentosus, Xylechinosomus brasiliensis, X. hirsutus.

Araucaria araucana.
Hylurgonotus solidus.

Araujia angustifolia.
Araptus araujiae.

Araujia hortorum.
Araptus araujiae.

Arbutus xalapensis.
Corthylus detrimentosus.

Ardisia sp.
Tricolus inornatus.

Arecastrum romanzoffianum.
Phloeoborus rudis.

Artocarpus spp.
Coccotrypes marginatus.

Astronium graveolens.
Scolytodes punctifrons.

B

Balfourodendron reidelianum.
Scolytus thoracicus.

Bauhinia variegata.
Hypothenemus aulmanni.

Betula alba.
Scolytus intricatus, Taphrorychus villifrons.

Betula costata.
Scolytus dahuricus, S. ratzeburgi.

Betula platyphylla.
Scolytus dahuricus, S. ratzeburgi.

Bignonia unquiscati.
Hylocurus robustus.

Bruguiera parviflora.
Xyleborus cognatus.

Bruguiera sp.
Coccotrypes fallax, C. nitidus, Cryphalus walkeri, Hypothenemus birmanus.

C

Calophyllum inophyllum var. **takamaka.**
Cryphalus trypanus.

Campnosperma sp.
Coccotrypes marginatus.

Carapa guianensis.
Scolytodes triangulus.

Castanea sativa.
Scolytus intricatus.

Casuarina equisetifolia.
Corthylus nudus.

Cayaponia ficifolia.
Hypothenemus longipilis.

Cecropia candolleana.
Coccotrypes fallax.

Cecropia insignis.
Araptus laevigatus, Coccotrypes advena, C. cyperi, Scolytodes acares, S. atratus, S. acuminatus, S. blandfordi, S. caudatus, S. maurus, S. parvulus.

Cecropia mexicana (= C. obtusifolia).
Scolytodes cecropii.

Cecropia obtusifolia.
Coccotrypes cyperi, Hypothenemus crudiae, H. eruditus, Scolytodes acares, S. atratus, S. acuminatus, S. blandfordi, S. caudatus, S. cecropiavorus, S. glabrescens, S. obscurus, S. parvulus.

Cecropia peltata.
Coccotrypes advena, C. carpophagus, C. cyperi, Hypothenemus africanus, H. crudiae, H. eruditus, Scolytodes acares, S. acuminatus, S. atratus, S. borealis, S. caudatus, S. maurus.

Cecropia pittieri.
Scolytodes pacificus.

Cecropia polyphlebia.
Scolytodes atratus, S. acuminatus, S. cecropiavorus, S. maurus.

Cecropia schreberiana.
Scolytodes ovalis.

Cecropia sp.
Hypothenemus eruditus, Scolytodes borealis, S. hondurensis, S. pilifrons, S. suspectus, S. unipunctatus.

Cedrela mexicana.
Xyleborus alluaudi, X. elongatus.

Cedrela odorata.
Xylosandrus curtulus.

Cedrus atlantica.
Cryphalus piceae, Kissophagus novaki.

Cedrus deodara.
Pityogenes calcaratus.

Celtis spinosa.
Chramesus argentinensis, C. aspericollis, C. globosus.

Celtis sp.
Chramesus globosus.

Ceriops candolleana.
Coccotrypes fallax.

Coffea canephora.
Xyleborus conidens.

Coffea sp.
Ambrosiodmus lecontei, Hypothenemus eruditus, H. seriatus, Xyleborus ferrugineus, Xylosandrus compactus.

Crataegus monogyna.
Scolytus rugulosus.

Crataegus spp.
Corthylus fuscus.

Croton reflexus.
Cnesinus lecontei.

Cunninghamia lanceolata.
Phloeosinus sinensis.

Cupressus funebris.
Phloeosinus bicolor.

Cupressus lusitanica.
Phloeosinus bicolor.

Cupressus macrocarpa.
Chramesus spinosus.

Cupressus torulosa.
Phloeosinus bicolor.

Cydonia oblonga.
Scolytus amygdali.

Cynanchum tataricum.
Cynanchophagus cornutus.

E

Elaeis guineensis.
Xylosandrus crassiusculus.

Eleagnus angustifolia.
Scolytus jaroschewskii.

Enterolobium contortisiliquum.
Xyleborus neivai.

Eriobotrya japonica.
Scolytus amygdali, S. rugulosus.

Erythrina cristagalli.
Araptus sparsepunctatus.

Eschweilera odora.
Xyleborus affinis.

Eucalyptus tereticornis.
Hypothenemus elaphus, H. eruditus, Xyleborus ferrugineus.

Eucalyptus sp.
Xyleborinus saxesini.

Eugenia caryophyllata.
Hypothenemus birmanus.

Euterpe edulis.
Xyleborus ferrugineus.

Euterpe oleracea.
Xyleborus ferrugineus.

Excoecaria sp.
Xyleborus cognatus.

F

Fagara coco.
Phloeotribus jujuya.

Fagus crenata.
Indocryphalus aceris.

Ficus hispida.
Scolytodes concavus.

Ficus insipida.
Scolytodes amoenus, S. punctifrons.

Ficus sp.
Scolytodes circumsetosus.

Fraxinus mandshurica.
Hylesinus varius.

G

Geoffroea decorticans.
Acorthylus robustus.

Gleditsia triacanthos.
Araptus sparsepunctatus, Cnesinus dividuus, Cryptocarenus acaciae, Hylocurus vianai.

Gliricidia maculata.
Hypothenemus eruditus.

Guada angustifolia.
Hylocurus pilosus.

H

Hamamelis japonica.
Indocryphalus majus.

Heritiera fomes.
Coccotrypes litoralis, C. robustus.

Horsfieldia irya.
Coccotrypes myristicae.

J

Juglans cinerea.
Monarthrum mali, Xyleborus sayi.

Juglans regia.
Sphaerotrypes coimbatorensis.

Juniperus sabina.
Phloeosinus turkestanicus.

Juniperus sp.
Phloeosinus tacubayae.

K

Khaya nyasica.
Eccoptopterus spinosus, Xyleborus affinis, X. alluaudi, X. elongatus.

L

Larix gmelinii.
Ips subelongatus.

Laurus nobilis.
Liparthrum colchicum, L. genistae.

Ligustrum incidum.
Cnesinus dividuus.

Ligustrum lucidum.
Cnemonyx brevisetosus, Cryptocarenus punctifrons.

Lithocarpus edulis.
Coccotrypes graniceps.

Lomatia hirsuta.
Phloeotribus huapiae.

Luffa acutangula.
Dendrocranulus declivis.

M

Macadamia sp.
Cryptocarenus seriatus, Xyleborus spp.

Macaranga sp.
Coccotrypes gedeanus.

Malus pumila.
Scolytus japonicus, S. schevyrewi.

Malus sylverstis.
Scolytus amygdali.

Mansonia altissima.
Xylosandrus crassiusculus.

Marsdenia mexicana.
Araptus fossifrons.

Milicia excelsa.
Eccoptopterus spinosus, Xyleborus affinis, X. elongatus.

Morrenia brachystephana.
Araptus pubescens.

Morus alba.
Cryphalus exiguus.

Muehlenbeckia sagittifolia.
Hypothenemus hampei.

Myristica ?elliptica.
Coccotrypes myristicae.

Myrocarpus frondosus.
Cnemonyx errans, Camptocerus inoblitus.

N

Nectranda sp.
Acorthylus robustus, Chramesus aspericollis.

Nothofagus autartica.
Gnathotrupes cirratus, G. impressus.

Nypa fruticans.
Leptoxyleborus concisus.

O

Ochroma pyrimidale.
Hypothenemus eruditus.

P

Parkinsonia aculeata.
Xylechinus imperialis.

Persea edulis.
Indocryphalus intermedius.

Phorandendron velutinum.
Pseudothysanoes peniculus.

Picea crassifolia.
Dryocoetes hectographus, Ips nitidus, Polygraphus poligraphus, Scolytus sinopiceus.

Picea jezoensis.
Hylurgops glabratus, Pityogenes chalcographus, Polygraphus sachalinensis.

Picea koraiensis.
Dryocoetes hectographus, Hylurgops glabratus, Orthotomicus golovjankoi.

Picea wilsoni.
Scolytus sinopiceus.

Picea sp.
Ips mannsfeldi, I. typographus, Polygraphus rudis.

Pinus arizonica.
Conophthorus ponderosae, Dendroctonus adjunctus, D. frontalis, D. mexicanus, D. rhizophagus, D. valens, Ips acuminatus, I. grandicollis, I. integer, I. lecontei, I. pini.

Pinus arizonica stormiae.
Dendroctonus brevicomis.

Pinus armandi.
Cyrtogenius luteus, Ips acuminatus, I. sexdentatus, Orthotomicus erosus, Pityogenes japonicus, Polygraphus poligraphus, Tomicus piniperda, Trypodendron lineatum.

Pinus ayachuite.
Conophthorus ponderosae, Dendroctonus rhizophagus, D. valens, Ips bonanseai, I. lecontei, Pityophthorus aztecus.

Pinus caribaea.
Ips calligraphus.

Pinus cembroides.
Dendroctonus mexicanus, Ips bonanseai.

Pinus chihuahuana.
Dendroctonus adjunctus, D. mexicanus, D. rhizophagus, Ips bonanseai, I. integer.

Pinus cooperi.
Conophthorus ponderosae, Dendroctonus mexicanus, D. rhizophagus, Ips integer, I. lecontei, I. pini.

Pinus discolor.
Conophthorus edulis.

Pinus douglasiana.
Conophthorus conicolens, Dendroctonus mexicanus, D. valens.

Pinus durangensis.
Dendroctonus adjunctus, D. approximatus, D. brevicomis, D. frontalis, D. mexicanus, Gnathotrichus sulcatus, Ips bonanseai, I. grandicollis, I. integer, I. pini.

Pinus eldarcia.
Orthotomicus erosus.

Pinus engelmanni.
Dendroctonus mexicanus, D. valens, Ips bonanseai, I. integer, I. lecontei, I. pini.

Pinus estevezii.
Dendroctonus brevicomis.

Pinus flexilis.
Dendroctonus adjunctus, Ips bonanseai.

Pinus greggii.
Dendroctonus frontalis, D. mexicanus, D. valens.

Pinus halepensis.
Tomicus destruens.

Pinus hartwegii.
Conophthorus ponderosae, Gnathotrichus sulcatus, Hylurgops subcostulatus alternans, Dendroctonus mexicanus, D. parallelocollis,

D. valens, Ips bonanseai, I. integer, Pityophthorus aztecus.

Pinus herrerai.
Dendroctonus adjunctus, D. mexicanus, D. rhizophagus, D. valens.

Pinus jefferi.
Dendroctonus rhizophagus, D. valens.

Pinus koraiensis.
Dryocoetes hectographus, Ips acuminatus, I. duplicatus, I. typographus, Tomicus minor, T. pilifer, T. piniperda.

Pinus lagunae.
Conophthorus edulis.

Pinus lawsoni.
Dendroctonus adjunctus, D. valens.

Pinus leiophylla.
Dendroctonus rhizophagus, D. valens, Ips bonanseai, I. grandicollis, I. integer, I. lecontei.

Pinus lumholtzii.
Dendroctonus rhizophagus.

Pinus massoniana.
Cryphalus massonianus.

Pinus maximinoi.
Dendroctonus adjunctus, D, frontalis, D. mexicanus, D. valens, Ips calligraphus, I. integer.

Pinus michoacana.
Dendroctonus adjunctus, D. approximatus, D. mexicanus, D. rhizophagus, D. valens, Ips calligraphus, Pseudoips mexicanus.

Pinus montezumae.
Dendroctonus valens, Hylurgops subcostulatus alternans, Ips calligraphus, I. grandicollis, I. integer, Pityophthorus aztecus.

Pinus oocarpa.
Dendroctonus approximatus, D. valens, Gnathotrichus sulcatus, Ips bonanseai, I. calligraphus, I. grandicollis, Xyleborus intrusus.

Pinus patula.
Conophthorus mexicanus, Dendroctonus adjunctus, D. approximatus, D. mexicanus, Ips bonanseai, I. grandicollis, I. integer.

Pinus pinceana.
Dendroctonus adjunctus, D. mexicanus.

Pinus pinea.
Pityogenes trepanatus, Tomicus destruens.

Pinus ponderosae.
Dendroctonus rhizophagus.

Pinus pringlei.
Conophthorus ponderosae, Dendroctonus frontalis, D. parallelocollis.

Pinus pseudostrobus.
Conophthorus ponderosae, D. approximatus, D. valens, Hylurgops subcostulatus alternans, Ips calligraphus, I. grandicollis, I. integer.

Pinus quadrifolia.
Ips pini.

Pinus radiata.
Ips integer.

Pinus rudis.
Conophthorus ponderosae, Ips bonanseai, I. integer, Pityophthorus aztecus, Pseudoips mexicanus.

Pinus sylvestris.
Crypturgus mediterraneus, Dendroctonus rhizophagus, Ips acuminatus.

Pinus tabulaeformis.
Cryphalus tabulaeformis chienzhuangensis, Hylurgops longipilus, Ips acuminatus, I. sexdentatus, Tomicus minor.

Pinus tecumanni.
Dendroctonus frontalis.

Pinus teocote.
Dendroctonus frontalis, D. valens, I. grandicollis, I. integer, Pityophthorus aztecus.

Pinus uncinata.
Hylastes ater, Pityogenes bistridentatus.

Pinus yunnanensis.
Tomicus piniperda.

Pinus sp.
Hylocurus microcornis.

Pistacia vera.
Carphoborus kushkensis.

Platycladus orientalis.
Phloeosinus bicolor.

Populus angulata.
Xyleborinus linearicollis.

Populus balsamifera.
Corthylus nudus.

Populus deltoides.
Corthylus nudus.

Populus sp.
Scolytus multistriatus.

Pouteria salicifolia.
Cnesinus ampliatus.

Prunus amygdalus.
Scolytus japonicus, S. schevyrevi.

Prunus armeniaca.
Scolytus japonicus.

Prunus germeniaca.
Scolytus schevyrevi.

Prunus glandulosa.
Scolytus japonicus, S. schevyrevi.

Prunus persica.
Scolytus japonicus, S. schevyrevi.

Pseudotsuga flahaulti.
Dendroctonus pseudotsugae, Gnathotrichus sulcatus, Pityophthorus orarius.

Pseudotsuga macrolepsis.
Pityophthorus orarius.

Pseudotsuga menziesii.
Ips sexdentatus, Pityogenes bidentatus, Pityophthorus pityographus, Scolytus aztecus.

Psidium sp.
Microcorthylus porrectus.

Pterocarya stenoptera.
Polygraphus amplifolius, P. pterocaryi.

Pyrus bretschneideri.
Scolytus japonicus, S. schevyrevi.

Pyrus communis.
Corthylus fuscus, Scolytus amygdali.

Pyrus domestica.
Scolytus amygdali.

Q

Quercus acutissima.
Polygraphus querci.

Quercus myrsinaefolia.
Coccotrypes graniceps.

Quercus petraea.
Taphrorychus villifrons.

Quercus rober.
Taphrorychus villifrons.

Quercus variabilis.
Coccotrypes carpophagus.

Quercus sp.
Hylocurus microcornis, Xyleborus dispar.

R

Rhizophora conjugata.
Coccotrypes fallax.

Rhizophora mucronata.
Coccotrypes fallax, C. litoralis, C. rhizophorae, Ernoporus inermis.

Rhizophora sp.
Coccotrypes fallax, C. nubilus.

Rhodiola rosea.
Dryocoetes krivolutzkajae.

Robinia pseudoacacia.
Cnesinus dividuus.

S

Sabina chinensis.
Phloeosinus bicolor.

Saccharum spontaneum.
Coccotrypes barbatus.

Salix babylonica.
Corthylus nudus.

Salix cinerea.
Taphrorychus villifrons.

Schinopsis balansae.
Spermophthorus apuleiae.

Schinopsis sp.
Araptus frenatus.

Sebastiania brasiliensis.
Cnemonyx flavicornis.

Sesbania grandiflora.
Hypothenemus aulmanni.

T

Terminalia australis.
Pityophthorus argentinensis.

Tetrapanax papyriferum.
Hypothenemus seriatus.

Tilia caucasica.
Ernoporicus caucasicus.

U

Ulex europaeus.
Phloeotribus rhododactylus.

Ulmus parvifolia.
Scolytus multistriatus.

Ulmus propinqua.
Scolytus butovitschi, S. schevyrevi.

Ulmus pumila.
Scolytus butovitschi, S. esuriens, S. japonicus, S. schevyrevi, S. semenovi.

Ulmus scabra.
Scolytus scolytus.

X

Xanthium pungens.
Hypothenemus seriatus.

Xylopia sp.
Scolytodes impressus.

Host List for Platypodidae

A

Acacia mangium.
Euplatypus parallelus, Platypus transformis, Teleplatypus ustulatus.

B

Brosimum spp.
Euplatypus parallelus.

C

Carya illinoensis.
Euplatypus segnis.

Cedrela mexicana.
Euplatypus hintzi.

Corynocarpus sp.
Platypus apicalis.

Croton spp.
Euplatypus parallelus.

D

Dryoblanops aromatica.
Platytarsulus biconicus, P. confusus.

E

Eucalyptus maculata.
Crossotarsus armipennis.

Eucalyptus sp.
Platypus cylindrus.

F

Ficus spp.
Euplatypus parallelus.

G

Gmelina arborea.
Euplatypus parallelus.

H

Heritiera littoralis.
Crossotarsus externedentatus.

K

Khaya nyasica.
Doliopygus exilis, D. serratus, Euplatypus hintzi.

L

Lonchocarpus rugosus.
Euplatypus parallelus.

M

Metopium brownei.
Euplatypus parallelus.

Milicia excelsa.
Doliopygus serratus, Euplatypus hintzi.

O

Ochthocosmus africans.
Platypus ochthocosmus.

P

Pandanus boninensis.
Phylloplatypus pandani.

Pasania edulis.
Platypus quercivorus.

Populus caspica.
Platypus cylindrus.

Populus deltoides.
Megaplatypus mutatus.

Q

Qualea brevipededicellata.
Euplatypus parallelus.

Quercus mongolica var. grosseserrata.
Platypus quercivorus.

Quercus spp.
Euplatypus parallelus.

S

Salix spp.
Megaplatypus mutatus.

Shorea lepidota.
Platytarsulus declivis.

T

Terminalia superba.
Doliopygus dubius.

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Family Scolytidae Index

(For 1992 catalog, Supplement 1, and Supplement 2)

The following index is a complete list of every generic name presently recognized as valid and every species (and their synonyms) of Scolytidae referred to in the original 1992 catalog, the first supplement, and in the present supplement. Fossil species are indicated by an "*". A closed circle "•" indicates taxons that were either recognized as **valid** in the 1992 catalog, but are now recognized as *synonyms or* taxons that were regarded as *synonyms* in the 1992 catalog, but are now recognized as **valid**. Generic synonyms are not included unless they were validated after 1992. All generic synonyms are listed in the index at the end of the 1992 catalog.

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africanus (Browne)	478		
alternans (Schedl)	478	107	
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angolensis (Schedl)	478		
angulatus (Schedl)	478		
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apicalis (Schedl)	478		
artocarpi (Browne)	478		
ashantius (Schedl)	478		
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(= **euphorbiae** (Schedl))			
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bicaudatus (Eggers)	479		
biconicus (Schedl)	479		
bidens (Schedl)	479		
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(= **bidentis** Wood)			
bidentatus (Schedl)	479		
bidentis Wood	479		
bispinosus (Eggers)	479		
bolivianus (Eggers)	479		
borneensis Schedl	479		
brasiliensis (Schedl)	479		
caelatus (Schedl)	479		

	1992 catalog	Supplement 1	Supplement 2
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caudatulus (Schedl)	479	107	
caudatus (Browne)	479		
cavifrons Nunberg (= **biconicus** (Schedl))	479		
celtis (Schedl)	480		
chiriquensis (Blandford)	480	107	
ciliatus (Hagedorn)	480		
congonus (Eggers)	480		
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•*denticulus* (Eggers) (= **perexiguus** (Blandford))	480		72
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euphorbiae (Schedl)	480		
excavatus (Schedl)	480		
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explanatus Bright		108	
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fallax Eggers (= **quadrituberculatus** (Schedl))	483		
fici Browne	481		72
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grandis Browne	481		72
granulatus (Ferrari)	481		
harongae (Schedl)	481		
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inclinans (Schedl)	481		
insularis (Eggers)	481		
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katangensis (Eggers)	481		
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kivuensis (Schedl)	481		
latedeclivis Schedl (= **sumatranus** Strohmeyer)	484		
lefevrei (Browne)	481		
lepidus (Wichmann)	482		
major (Schedl)	482		
medius (Eggers)	482		
mimicus (Schedl)	482	107	
octodentatus Browne	482	107	73
octospinosus (Schedl)	482		
ocularis (Wood)	482		
onerosus (Schedl)	482		
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parcius (Schedl)	482		
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pilosus (Eggers)	483		
quadridens (Schedl)	483		
quadrispinosus (Eggers)	483		
quadrituberculatus (Schedl)	483		
robertsi (Browne)	483		
sexdentatus (Eggers)	483		
sexpinosus (Schedl)	483		
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subimmunitus (Schedl)	484		
sumatranus Strohmeyer	484		
suspectus (Schedl)	484		
sutirifer (Schedl)	484	107	
tanganyikaensis (Schedl)	484		
tenuis (Schedl)	484		
tridens (Schedl)	484		
tridentatus (Schedl)	484		
tropicus (Schedl)	484	107	
tuberculatus (Eggers)	484		
tuberculatus Schedl (= **tuberculifer** Wood)	484		
tuberculifer Wood	484		
uncinatus Wood (= **granulatus** (Ferrari))	481		
uncus (Schedl)	484		
uniformis (Schedl)	484		
variabilis (Browne)	484		
Acorthylus Brethes	852	182	130
asperatus Brethes	853		
bosqui (Schedl)	853	182	
gracilis (Schedl)	853	182	
pruni (Wood)	853		
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hirsutus Schedl	73		
Amasa Lea	681	148	105
abruptus Eggers (= **resectus** (Eggers))	684		105
aglaiae (Browne)		149	
amputatus (Blandford)	682	148	105
anomalus (Schedl)	682		
aspersus (Sampson)	682		
banksiae (Schedl)	682		
batoerradensis (Schedl)	682		
beesoni (Eggers)	682		

	1992 catalog	Supplement 1	Supplement 2
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brevipennis Schedl (= **schlichi** (Stebbing))	684		
calamoides (Murayama)	682		
circulicauda Browne (= **cylindriformis** (Schedl))	682		
circumcisulus (Schedl)	682		
concitatus (Schedl)	682		
consularis (Schedl)	682		
cylindriformis (Shedl)	682		
darwini Schedl	723		106, 111
dasyurus (Browne)	683		
doliaris (Schedl)	683		
eugeniae (Eggers)	683		
exactus (Schedl)	683		
foveicollis (Browne)	683		
fulgens (Schedl)	683		
fuscipilosus (Eggers)	683		
geminatus (Hagedorn)	683		
glaber Eggers (= **schlichi** (Stebbing))	684		
glaucus (Sampson)	683		
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laticaudatus (Eggers)	683		
mixtus (Schedl)	683		
nakazawai (Browne)		149	
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nitidior (Eggers)	683		
nobilis (Eggers)	683		
opacicauda Eggers (= **resectus** (Eggers))	684		
opalescens (Schedl)	683		
orbicaudatus (Eggers)	684		
resecans (Eggers)	684		
resectus (Eggers)	684		
schlichi (Stebbing)	684		
sirambeanus (Eggers)	684	148	
striatotruncatus (Schedl)	684		
tereticollis (Schedl)	685		
thoracius Lea (= **truncatus** (Erichson))	685		
truncatiferus (Schedl)	685		
truncatiformis (Eggers)	685		
truncatus (Erichson)	685	149	
truncatus Stebbing (= **schlichi** (Stebbing))	684		
umbratulus (Schedl)	685		
uniseriatus Eggers (= **schlichi** (Stebbing))	684		
verax Schedl (= **schlichi** (Stebbing))	684		
versicolor (Sampson)	685		
Ambrosiodmus Hopkins	670	146	104
addendus (Schedl)	670		
adustus (Eggers)	670	146	
aegir (Eggers)	670		
albizzianus (Schedl)	670	146	

	1992 catalog	Supplement 1	Supplement 2
alsapanicus (Schedl)	670		
anepotulus (Eggers)	670		
anisandrus Schedl	674	147	
(= **hagedorni** (Iglesias))			
apicalis (Blandford)	670	146	104
artegranulatus (Schedl)	671		
asperatus (Blandford)	671	146	
bispinosulus (Schedl)	671		
bostrichoides (Schedl)	671		
brasiliensis Eggers			
(= **obliquus** (LeConte))	678		
brunneipes (Eggers)	671	146	
camphorae (Hagedorn)	672		
carinipennis Eichhoff	677		
(= **obliquecaudata** Motschulsky)			
catharinensis (Eggers)	672	146	104
citri Beeson	671		
(= **asperatus** (Blandford))			
coffeiceus (Schedl)	672	146	
colossus (Blandford)	672		
compressus (Lea)	672	146	
congonus Hagedorn	673		
(= **eichhoffi** (Schreiner))			
consimilis (Eggers)	672		
conspectus (Schedl)	672		104
crassus Hagedorn	676		
(= **minor** (Stebbing))			
cristatuloides Schedl	671		
(= **asperatus** (Blandford))			
cristatulus (Schedl)	672		
cristatus Hagedorn	671		
(= **apicalis** (Blandford))			
declivispinatus (Schedl)	672		
desectus (Eggers)	672		
desectus arduus Schedl	673		
(= **desectus** (Eggers))			
devexulus (Wood)	673	146	104
devexus (Schedl)	673		
devexus Wood	673		
(= **devexulus** (Wood)			
dihingensis (Eggers)	673		
diversipennis (Schedl)	673		
eichhoffi (Schreiner)	673		
fabricii Schedl	671		
(= **apicalis** (Blandford))			
facetus (Schedl)	673		
ferus (Wood)	673	146	
fraterculus (Schaufuss)	674		
funebris (Schedl)	674		
funereus (Lea)	674	146	
funestus (Schedl)	674		
gilvipes Blandford	677		
(= **obliquus** (LeConte))			
guatemalensis Hopkins	674		
(= **hagedorni** (Iglesias))	147		
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(= **lecontei** Hopkins)			
hagedorni (Iglesias)	674	147	104

	1992 catalog	Supplement 1	Supplement 2
holtzi Eggers	670		
(= **aegir** (Eggers))			
illepidus Schedl	678		
(= **obliquus** (LeConte))			
incertus (Schedl)	674		
inferior (Schedl)	675		
innominatus (Schedl)	675		
inoblitus (Schedl)	675		
inopinatus (Schedl)	675		
katangensis (Eggers)	746	160	105, 114
klapperichi Bright	675		
lantanae (Eggers)	675		
latecompressus (Schedl)	675		
latisulcatus (Eggers)	675		
lecontei Hopkins	675	147	
lewekianus Eggers	676		
(= **lewisi** (Blandford))			
lewisi (Blandford)	675	147	105
linderae Hopkins	677		
(= **obliquus** (LeConte))			
loebli (Schedl)	676		
•*luteus* Schedl	748		105, 114
(= **katangensis** (Eggers))			
mahafali (Schedl)	676		
mamibillae (Browne)	676		
melanarius Schedl	678		
(= **obliquus** (LeConte))			
mexicanus Eggers	678		
(= **obliquus** (LeConte))			
minor (Stebbing)	676	147	
natalensis (Schaufuss)	676	147	
neglectus (Schedl)	677		
nepocranus (Schedl)	677		
nepos Eggers	674		
(= **funereus** (Lea))			
nepos robustus Schedl	674		
(= **funereus** (Lea))			
nepotulomorphus Eggers	671		
(= **asperatus** (Blandford))			
nepotulus Eggers	671		
(= **asperatus** (Blandford))			
nigripennis (Schedl)	677		
nodulosus (Eggers)	677	147	
obliquecaudata Motschulsky	677	147	
obliquus (LeConte)	677	147	105
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(= **nodulosus** (Eggers))			
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pseudobrasiliensis Eggers	678		
(= **obliquus** (LeConte))			

	1992 catalog	Supplement 1	Supplement 2
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pseudocolossus (Schedl)	679		
raucus (Schedl)	679		
restrictus (Schedl)	679		
•*rhodesianus* (Eggers) (= **katangensis** (Eggers))	679		105
rubricollis (Eichhoff)	679	148	105
rugicollis (Blandford)	680	148	
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sakoae (Schedl)	680	148	
sandragotoensis (Schedl)	680		
sarawakensis (Eggers)	680	148	
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scabrior Schedl (= **neglectus** (Schedl))	677		
scalaris (Schedl)	680	148	
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semirufus Schedl (= **obliquecaudata** Motschulsky)	677		
sexdentatus (Eggers)	680		
signatus Schedl (= **funereus** (Lea))	674		
signiceps (Schedl)	680		
signifer (Schedl)	680		
strohmeyeri Schedl (= **rubricollis** (Eichhoff))	679		
subnepotulus (Eggers)	680		
sulcatus (Eggers)	680		
szentivanyi Schedl (= **colossus** (Blandford))	672		
taboensis Schedl (= **rubricollis** (Eichhoff))	679		
tachygraphus (Zimmermann)	680	148	105
tectus Schedl (= **declivispinatus** (Schedl))	672		
tegalensis Eggers (= **lewisi** (Blandford))	676		
tenebrosus (Schedl)	681		
tomicoides (Eggers)	681		
tortuosus (Schedl)	681		
triton (Schaufuss)	681	148	
troiaki (Schedl)	681		
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(= **seriatus** Eggers)			
brasiliensis (Schedl)	902		
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(= **heveae** (Hagedorn))			
coronatus Wood	902		
(= **brevicollis** Eggers)			
diadematus Eggers	903	190	139
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(= **seriatus** Eggers)			
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laevigatus (Blandford)	903	190	
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(= **heveae** (Hagedorn))			
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(= **heveae** (Hagedorn))			
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dryobalanopsis Schedl	828	175	
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major Browne	828	175	126
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atomus LeConte (= **pusillus** (Gylenhal))	628	136	
atticus Eggers (= **cinereus** (Herbst))	623		
barbeyi Strohmeyer (= **numidicus** Ferrari)	625		
beesoni Eggers	620		
borealis Swaine	620	134	95
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cedris Eichhoff (= **pusillus** (Gylenhal))	628	136	
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cylindricollis Eggers (= **pusillus** (Gylenhal))	629	136	
danicus Eggers (= **pusillus** (Gylenhal))	629		
dubius Eichhoff (= **mediterraneus** Eichhoff)	625	135	
gaunersdorferi Reitter (= **pusillus** (Gylenhal))	628		
hispidulus Thomson	624	135	96
maulei Roubal (= **pusillus** (Gylenhal))	629		
mediterraneus Eichhoff	624	135	97
minimus Stebbing (= **pusillus** (Gylenhal))	629		
numidicus Ferrari	625	135	96
numidicus abbreviatus Eggers (= **numidicus** Ferrari)	625		
parallelocollis Eichhoff (= **pusillus** (Gylenhal))	628	136	
pusillus (Gyllenhal)	625	135	96
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Ctonoxylon Hagedorn	836	178	127
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•*atrum* Browne (= **hamatum** Schedl)	836		
auratum Hagedorn	837		
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(= **pruinosum** (Blandford))			
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(= **hirtum** (Hagedorn))			
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nsafukalae (Schedl)	700		
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perlaetus Schedl (= **pelliculosum** Hagedorn)	701		
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•*longipennis* Browne	566	124	86
(= **elongatissimus** Wood)			
lowi Bright		125	
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papuanus Eggers	567		
(= **papuae** Wood)			
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(= **papuensis** Wood)			
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(= **luteus** (Blandford))			
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clematis (Wood)	969	202	
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autographus (Ratzeburg)	572	127	88
autographus sachalinensis Sokanovskii (= **autographus** (Ratzeburg))	578		
baikalicus Reitter	579	128	88
betulae Hopkins	579	128	88
brasiliensis Schedl (= **autographus** (Ratzeburg))	578		
brevipilosus Murayama	580		
***carbonarius** Scudder	580		
carpini Eggers	580		88
carpini Stark (= **carpini** Eggers)	580		
carpinivorus Choo & Woo	580		
caryi Hopkins	580	128	
cerasi Eggers	580		
cerasi Stark (= **cerasi** Eggers)	580		
confusus Swaine	580	128	88
conspicuus Bright		129	
cristatus Inouye & Nobuchi	582		
***diluvialis** (Wickham)	582	128	
eichhoffi Ferrari	582		
eichhoffi Hopkins (= **betulae** Hopkins)	579		
formosanus Nobuchi	582		
granicollis (LeConte)	582	128	88, 513
hectographus Reitter	582	128	89
himalayensis Strohmeyer	583		
indicus Stebbing	583		89
infuscatus Murayama	583		89
italus Eggers	583	129	
karamatsu Sawamoto	584		
krivolutzkajae Mandelshtam			90
leonhardi Eggers (= **alni** (Georg))	572		
liquidambaris Hopkins (= **betulae** Hopkins)	579		
longicollis Eggers (= **autographus** (Ratzeburg))	578	128	
marshami Rye (= **alni** (Georg))	572		
melaenus Eichhoff	584		
niijimai Nobuchi	584		
orientalis Korenzov (= **infuscatus** Murayama)	583		89
padi Stark	584		89
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pilosus Blandford	584		
pini Niisima	584		89
pseudotsugae Swaine	578		
(= **autographus** (Ratzeburg))			
pubescens Swaine	571		
(= **affaber** (Mannerheim))			
pumilio Eichhoff	584		
pusillus Eggers	584		
quadrisulcatus Strohmeyer	584		
ramicola Reitter	585	129	
rotundicollis Eggers	585		
rugicollis Eggers	585	129	89
sardus Strohmeyer	587		90
(= **villosus** (Fabricius))			
secheiti Swaine	585		89
semicastaneus Mannerheim	578		
(= **autographus** (Ratzeburg))			
septentrionis Mannerheim	577		
(= **autographus** (Ratzeburg))			
similis Eggers	572		
(= **alni** (Georg))			
striatus Eggers	585		89
suecicus Eggers	585		
uniseriatus Eggers	586		90
ussuriensis Eggers	586		90
ussuriensis rugulosus Eggers	586		
(= **ussuriensis** Eggers)			
victoris Mulsant & Rey	578		
(= **autographus** (Ratzeburg))			
villosus (Fabricius)	586	129	90
villosus Herbst	576		
(= **autographus** (Ratzeburg))			
villosus minor Eggers	586	129	
(= **villosus** (Fabricius))			
villosus starhoni Reitter	586		
(= **villosus** (Fabricius))			
***Dryomites** Bright & Poinar		133	
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Dryocoetiops Schedl	587	129	90
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bicolor Schedl	587		
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(= **laevis** (Strohmeyer))			
diversicolor Eggers	588		
(= **laevis** (Strohmeyer))			
eugeniae (Schedl)	587		90
flavicornis (Blandford)	587		
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(= **coffeae** (Eggers))			
kepongi (Schedl)	588	129	90
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loebli Schedl	588		
(= **laevis** (Strohmeyer))			

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nitidus (Schedl)	588		
orbus Browne (= **laevis** (Strohmeyer))	588	130	
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Dryocoetoides Hopkins	656	142	102
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crenatus Eggers (= **cristatus** (Fabricius))	657		
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collaris Eggers (= **gracilipes** (Eichhoff))	820		
drescheri Eggers	820		
eccoptopterus (Schedl)	820	173	
gracilipes (Eichhoff)	820	173	
limbus Sampson	820	173	124
multispinosus (Hagedorn)	820		
sagittarius Schedl	820		
sexspinosus Motschulsky (= **spinosus** (Olivier))	821	173	
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squamulosus auratus Eggers (= **squamulosus** (Eggers))	821		
squamulosus duplicatus Eggers (= **limbus** Sampson)	820		
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Eidophelus Eichhoff	867	185	133
borneensis Browne	867	185	133
elegans Krivolutskaya (= **imitans** Eichhoff)	867		133
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minutus Blandford	867		
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africanus Schedl	849		
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caucasicus (Lindemann)	849	181	129
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eximius (Schedl)	850		
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Ernoporus Thomson	854	183	131
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antennarius (Schedl)	854		
armatus (Browne)	854		131
cinereus Herbst (= **tiliae** (Panzer))	857		
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dispar (Schedl)	855		
eggersi Kurenzov (= **tiliae** (Panzer))	857		131
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papuanus (Schedl)	855		
papuanus Browne (= **antennarius** (Schedl))	854		
quadridens (Schedl)	855		
ratzeburgi Ferrari (= **tiliae** (Panzer))	857		
shimanensis Murayama	855		
starki Eggers (= **tiliae** (Panzer))	857		
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Eupagiocerus Blandford	214	44	
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clarus Wood (= **dentipes** Blandford)	214		
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artehybridus Schedl (= **xanthopus** (Eichhoff))	697		
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assamensis Eggers (= **velatus** (Sampson))	695		
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filiformis (Schedl)	688		
fornicatior Eggers (= **fornicatus** (Eichhoff))	690		
fornicatus (Eichhoff)	688	149	106
fraternus Blandford (= **xanthopus** (Eichhoff))	696		
fulvus (Murayama)	690		
galeatus (Blandford)	690		
goloanus Browne	690		
granosus (Schedl)	690		
granulipennis Eggers (= **andamanensis** (Blandford))	686		
hybridus Eggers (= **xanthopus** (Eichhoff))	696		
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kersianus (Browne)		150	
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kivuensis Eggers (= **xanthopus** (Eichhoff))	696		
kororensis (Wood)	691		
laevis (Eggers)	691	150	106
limatus (Schedl)	691	150	
longehirtus Nunberg (= **xanthopus** (Eichhoff))	697		
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nandarivatus Schedl (= **destruens** (Blandford))	688		

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(= **xanthopus** (Eichhoff))			
nigrosetosus (Schedl)	692		
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(= **andamanensis** (Blandford))			
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(= **wallacei** (Blandford))			
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(= **interjectus** (Blandford))			
quadraticollis (Eggers)	693	150	
rameus Schedl	687		
(= **bicolor** (Blandford))			
rodgeri Beeson	687		
(= **bicolor** (Blandford))			
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(= **bicolor** (Blandford))			
rudis Eggers	696		
(= **xanthopus** (Eichhoff))			
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semirudis Blandford	696		
(= **xanthopus** (Eichhoff))			
senchalensis Beeson	686		
(= **andamanensis** (Blandford))			
sereinuus Eggers	696		
(= **xanthopus** (Eichhoff))			
sibsagaricus (Eggers)	693	150	
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(= **andamanensis** (Blandford))			
siporanus Hagedorn	695		
(= **wallacei** (Blandford))			
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crassus Beeson (= **despectus** (Walker))	91		
despectus (Walker)	90	20	
elongatus (Schedl)	91		
goliathoides Murayama (= **despectus** (Walker))	91		
granulifer Motschulsky (= **despectus** (Walker))	90		
insularum Beeson (= **despectus** (Walker))	91	20	18
javanus (Eggers)	91	20	18
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scobipennis Chapuis (= **despectus** (Walker))	90		
similis Eggers (= **despectus** (Walker))	91		
subcostatus Eggers (= **despectus** (Walker))	91		
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Gnathotrichus Eichhoff	1034	213	156
aciculatus Blackman (= **sulcatus** (LeConte))	1039		
alni Blackman (= **retusus** (LeConte))	1038		
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sulcatus (LeConte)	1038	213	156
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***americanus** Wickham	43		
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flohri (Eggers)	54		
fulgidus Blackman	54	12	514
fushunensis Murayama (= **plumbeus** Blandford)	60		13
gracilis LeConte	54	12	12
granosus Chapuis (= **porculus** Erichson)	61		
lifuanus Fauvel	55		
linearis Erichson	55	12	12
longicollis Swaine	56	13	12
longus LeConte (= **gracilis** LeConte)	54		
lowei Paiva	56		
macer LeConte	56	13	13
mexicanus Wood	57		
minutus Blackman (= **tenuis** Eichhoff)	63		
niger Wood	57		
nigrinus (Mannerheim)	57	13	13

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nitidus Swaine	55		
(= **gracilis** LeConte)			
opacus Erichson	57	13	13, 514
obscurus Chapuis	60	13	13
(= **plumbeus** Blandford)			
parallelus Chapuis	59	13	13
parvus Blackman	63		
(= **tenuis** Eichhoff)			
pinicola Bedel	49		
(= **ater** (Paykull))			
plumbeus Blandford	59	13	13
porculus Erichson	60	14	13
pusillus Blackman	63		
(= **tenuis** Eichhoff)			
retifer Wood	61		
rotundicollis Reitter	53		
(= **cunicularius** Erichson)			
ruber Swaine	61	14	13
salebrosus Eichhoff	61	14	13
scaber Swaine	61		
(= **porculus** Erichson)			
scabripennis Zimmermann	62		
(= **salebrosus** Eichhoff)			
scandinavicus Lekander	62		
scobinosus Eichhoff	61		14
(= **salebrosus** Eichhoff)			
septentrionali Eggers	60		
(= **plumbeus** Blandford)			
simplex Rey	59		
(= **opacus** Erichson)			
starki Eggers	53		12
(= **cunicularius** Erichson)			
subopacus Blackman	62		
substriatus Strohmeyer	62	14	
suspectus Bright	62		
swainei Eggers	61		
(= **porculus** Erichson)			
techangensis Tsai & Huang	62	14	14
tenuis Eichhoff	62	14	14, 514
variolosus Perris	56		
(= **linearis** Erichson)			
vastans Chapuis	54		
(= **gracilis** LeConte)			
webbi Blackman	61		
(= **porculus** Erichson)			
yukonis Fall	57		
(= **nigrinus** (Mannerheim))			
Hylastini LeConte	29	8	8
Hylastinus Bedel	64	15	14
achillei Reitter	64	15	
crenatulus Duftschmidt	67		
(= **obscurus** (Marsham))			
crenatus Olivier	66		
(= **obscurus** (Marsham))			
fankhauseri Reitter	64	15	
fuscescens Stephens	67		
(= **obscurus** (Marsham))			

	1992 catalog	Supplement 1	Supplement 2
kroaticus Fuchs (= **obscurus** (Marsham))	67	15	
obscurus (Marsham)	64	15	14
piceus Stephens (= **obscurus** (Marsham))	67		
pilosus Eggers (= **obscurus** (Marsham))	67		
tiliae Semenov	67	15	
trifolii Muller (= **obscurus** (Marsham))	66		
Hyledius Sampson	259	58	38
•**armatus** Schedl (= *spinifer* (Browne))	261		
asper Sampson (= **nitidicollis** (Motschulsky))	260		
birmanus (Eggers)	259	58	
borneensis (Schedl)	259	58	
brunneus (Browne)	259	58	38
canus (Browne)	259		
ceylonicus (Schedl)	259	58	
concinnulus (Walker)	259		
cribratus (Blandford)	260	58	
detersus (Chapuis)	260		
hylurgulus (Eggers)	260		
imitans (Eggers)	260		
jiri (Wood)	260		
kesiyae (Browne)		58	
latus Eggers (= **nitidicollis** (Motschulsky))	260	58	38
malayensis Schedl (= **cribratus** (Blandford))	260		
nanus Browne (synonym of **vilis** (Blandford))		58	
nitidicollis (Motschulsky)	260	58	
nudifrons Motschulsky (= **concinnulus** (Walker))	259		
papuanus (Schedl)	261		
penangensis (Schedl)	261	58	
philippinensis Schedl (= **nitidicollis** (Motschulsky))	261	58	
regalis (Wood)	261		
solomonicus (Browne)	261		38
spinifer (Browne) (= **armatus** Browne)	261		38
subcarinatus (Schedl)	261	58	
sumatranus (Eggers)	261		
sumatranus Eggers (= **hylurgulus** (Eggers))	260		
takahashii (Browne)	261		38
tuberculosus (Browne)	261		
vagans Eggers (= **nitidicollis** (Motschulsky))	260		
vilis (Blandford)	261	58	
xanthophylli (Browne)	261		
Hyleops Schedl	237		
glabratus Schedl	237		
Hylesininae Erichson	28	8	8
Hylesinini Erichson	64	14	14

	1992 catalog	Supplement 1	Supplement 2
Hylesinopsis Eggers	92	20	
•*acacicolens* Wood (= **kenyae** Wood)	92		18
africanus (Eggers)	92		
africanus Schedl (= **kenyae** Wood)	92		
africanus Schedl (= **ugandae** Wood)	95		
alluaudi (lepesme)	93		
angolanus Wood	93		
angolensis Schedl	93		
angolensis Schedl (= **angolanus** Wood)	93		
arabiae Schedl	93		
atakorae (Schedl)	93		
ater (Nunberg)	93		18
baphiae (Schedl)	93	20	
brincki (Schedl)	93	20	
cinchonae Schedl (= **seriatus** (Eggers))	95		
confusus (Eggers)	93	20	
decellei (Nunberg)	93		18
dimorphus (Schedl)	93		
dubius Eggers	93	20	
emarginatus (Nunberg)	94		
endroedyi (Schedl)	94		
ericius (Schaufuss)	94		18
fasciatus (Hagedorn)	94		
ficus (Schedl)	94		
fuscipennis (chapuis)	94	20	
globosus Hagedorn (= **fuscipennis** (Chapuis))	94		
granulatus (Lepesme)	94		
hirsutus (Schedl)	94		
hispidus (Eggers)	94		
horridus (Eggers)	94	21	
joveri (Schedl)	94	21	
kenyae Wood			18
niger (Schedl)	94	21	
oblongus (Eggers)	95		
orientalis (Eggers)	95		
pauliani (Lepesme)	95		
punctatus (Eggers)	95		
quadrituberculatus (Schedl)	95		
rhodesianus (Eggers)	95		
saudiarabiae (Schedl)	95		
secutus Wood (= **ugandae** Wood)	95	21	18
senegambiensis (Schedl)	95	21	
seriatus (Eggers)	95	21	
squamosus (Eggers)	95		
striatus (Schedl)	95	21	
sulcatus (Eggers)	95	21	
togonus (Eggers)	95	21	
ugandae Wood			19
variegatus (Eggers)	96		
Hylesinus Fabricius	74	17	15
aculeatus Say	74	17	15

	1992 catalog	Supplement 1	Supplement 2
alternans Schedl (= **macmahoni** (Stebbing))	81		
antipodus Schedl	75	17	
atomarius Chapuis	75		
aztecus Wood	75	17	15
bicolor (Eggers)	76		
bicolor Philippi	76		
botscharnikovi Stark	76	17	
californicus (Swaine)	76	17	15
caseariae Wood	76	17	
cholodkovskyi Berger	76	18	16
cinereus Swaine (= **aculeatus** Say)	75		
cingulatus Blandford	77	18	16
cordipennis Lea	77		
costatus Blandford	77		16
crenatus (Fabricius)	77	18	16
criddlei (Swaine)	79	18	16
dolus Schedl	79		
***dromiscens** Scudder	79		
elatus Niisima	79		16
elegans Thomson	80		
eos Spessivtsev	80	18	16
esau Gredler (= **toranio** (Danthione))	85		
***extractus** Scudder	80		
***facilis** Heer	80		
fasciatus LeConte	80	18	
fraxini Panzer (= **varius** (Fabricius))	86	19	18
fraxinoides Schedl (= **macmahoni** (Stebbing))	81		
guatemalensis (Wood)	80		
haemorrhoidalis Marsham (= **varius** (Fabricius))	89		
henscheli Knotek (= **varius** (Fabricius))	89		
hoferi Blackman (= **californicus** (Swaine))	76		
***hydropicus** (Wickham)	80	18	
imperialis Eichhoff (= **aculeatus** Say)	75		
irresolutus Walker	80		
laticollis Blandford	80	18	16
***lineatus** Forster	81		
•*lubarskii* Stark (= **laticollis** Blandford)	81		17
macmahoni (Stebbing)	81		
mandshuricus Eggers	81		17
melanocephalus Fabricius (= **varius** (Fabricius))	86		
mexicanus (Wood)	81		
nanulus Schedl	81		
niligrinus Eggers	82		
nobilis Blandford	82		17
oleiperda Fabricius (= **toranio** (Danthione))	83	19	17
oregonus (Blackman)	82		17

	1992 catalog	Supplement 1	Supplement 2
orni Fuchs	82	18	17
papuanus Eggers (= **cordipennis** Lea)	77		
persimilis Eggers (= **niligrinus** Eggers)	82		
picipennis Stephens (= **varius** (Fabricius))	89		
pravdini Stark	83		17
pruinosus Eichhoff	83		
prutenskyi Sokanovskii	83	19	
pubescens Fabricius (= **varius** (Fabricius))	86		
regius (Schedl)	83		
robustus Schedl (= **niligrinus** Eggers)	82		
scaber Marsham (= **toranio** (Danthione))	85		
shabliovskyi Kurenzov	83		17
striatus Eggers (= **laticollis** Blandford)	81		16
suturalis Redtenbacher (= **toranio** (Danthione))	85		
toranio (Danthione)	83	19	17
tristis Blandford (= **costatus** Blandford)	77		
tupolevi Stark	85	19	
tupolevi Eggers (= **tupolevi** Stark)	85		
tupolevi denticulosus Sokanovskii (= **tupolevi** Stark)	85		
varius (Fabricius)	85	19	17
wachtli Reitter	89	20	
Hylocurus Eichhoff	422	95	64
aberrans Wood	422	95	
acuminatus Schedl (= **dimorphus** (Schedl))	424		
acutedentatus Schedl	422		
alienus Eichhoff	422		
alternatus Eggers	422	96	
alternus Wood	422		
atkinsoni Wood	422	96	
beckeri Heqvist	422		
biconcavus Blackman	423		
bicornus (Blackman)	423	96	
bidentatus Schedl	423	96	
binodatus Wood	423	96	
biorbis Blackman (= **rudis** (LeConte))	427		
brasiliensis Nunberg	423		
cancellatus Blandford	423	96	64
carinifrons Atkinson	423	96	64
clarki Wood	423		
crinitus Blackman (= **hirtellus** (LeConte))	425		
crotonis Wood	423		
cuspidatus Eggers	423		
denticollis Schedl	423		
dilutus Wood	423		

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dimorphus (Schedl)	424	96	64
discifer Eichhoff	424		
disparilis Wood	424		
dissidens Wood	424		
dissimilis Wood	424		
dubius Schedl	424	96	
effeminatus Wood	424		
egenus Blandford	424		
elegans Eichhoff	424	96	514
equidens Wood	424		
errans Blandford	424		
femineus Wood	424	96	
flagellatus Wood	425		
flaglerensis Blackman	425		64
floridensis Atkinson	425	96	64
giganteus (Schedl)	425	96	
harnedi (Blackman)	425		
hirtellus (LeConte)	425	96	
impar Schedl	425		64
inaequalis Wood	425		
incomptus Wood	425		
intermedius Schedl	426	96	64
interpositus Schedl	426		
interruptus Schedl	426	96	
langstoni Blackman	426		64
longipennis Wood	426		
medius Wood	426		
micaceus Wood	426		
microcornis Wood	426		64
minor Wood (= **elegans** Eichhoff)	424		
nodulus Wood	426	97	
obtusipennis Schedl	426		
parkinsoniae Blackman	426	97	
pilosus Schedl	426	97	64
prolatus Wood	426		
pseudoimpar Schedl	427	97	
punctatorugosus (Schedl)	427		
quadrispinosus Blackman	427		
rectus Schedl (= **brasiliensis** Nunberg)	423		
retusipennis Blandford	427		
rivalis Wood	427		
robustus Schedl	427		64
ruber Wood	427		
rudis (LeConte)	427		
schwarzi Blackman	428		
scitulus Wood	428		
secus Wood	428		
simplex Blandford	428	97	
simplex Schedl (= **brasiliensis** Nunberg)	423		
singularis Wood	428		
spadix Blackman	428		
spinifex Blandford	428		
stachi Nunberg (= **robustus** Schedl)	427		
subgranulatus Schedl	428	97	64

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torosus Wood	428	97	64, 514
trispinatus Schedl	428	97	
vagabundus Blandford	428		
verrucosus Wood	428		
vianai Schedl	428		64
villifrons Wood	429		
Hylurdrectonus Schedl	186	34	
araucariae Schedl	186		31
araucariae Schedl (= **corticinus** Wood)	186		
corticinus Wood	186		
nanus Browne	186		
piniarius Schedl	186	34	
Hylurgonotus Schedl	186	34	31
antipodus (Eggers)	187	34	31
armaticeps Schedl	187	34	31
brunneus Schedl (= **tuberculatus** (Eggers))	187	35	
solidus (Schedl)	187		31
tuberculatus (Eggers)	187	35	31
Hylurgopinus Swaine	106	24	
opaculus LeConte (= **rufipes** (Eichhoff))	106		
rufipes (Eichhoff)	106	24	20
Hylurgops LeConte	29	8	8
abietiperda Bechstein (= **palliatus** (Gyllenhal))	38		
batnensis (Brisout)	30	9, 14	8
bonvouloiri (Chapuis)	30	9	
***corpulentus** Schedl	30		
cristatus Mannerheim (= **subcostulatus** (Mannerheim))	42		
decumanus Erichson (= **glabratus** (Zetterstedt))	33		
***dubius** (Hagedorn)	31		
***electrinus** (Germar)	31	9	
eusulcatus Tsai & Huang	31	9	
fallax Wichmann (= **batnensis** (Brisout))	30		
fuscus Duftschmidt (= **palliatus** (Gyllenhal))	38		
gergeri Eggers (= **batnensis** (Brisout))	30	9, 14	
glabratus (Zetterstedt)	31	9	8
grandicollis Swaine (= **incomptus** (Blandford))	34		
***granulatus** (Schedl)	33	9	
helferi Villa (= **palliatus** (Gyllenhal))	38		
imitator (Reitter)	33		9
incomptus (Blandford)	33	9	9
inouyei Nobuchi	34		
interstitialis (Chapuis)	34	9	9
junnanicus Sokanovskii	34		
knausi Swaine (= **planirostris** (Chapuis))	39		
lecontei Swaine (= **porosus** (LeConte))	39		

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likiangensis Tsai & Huang (= **longipilus** (Reitter))	35	9	
longipennis (Blandford)	34	9	9, 514
longipilus (Reitter)	34	9	9
major Eggers	35		9
marginatus Duftschmidt (= **palliatus** (Gyllenhal))	38		
modestus Murayama (= **spessivtsevi** Eggers)	41		10
niponicus Murayama (= **interstitialis** (Chapuis))	34		
palliatus (Gyllenhal)	35	9	9
parvus Eggers (= **palliatus** (Gyllenhal))	38		10
paykulli Duftschmidt (= **glabratus** (Zetterstedt))	33		
piceus Marsham (= **palliatus** (Gyllenhal))	38		
***piger** Wickham	38		
***pilosellus** Schedl	39	10	
planirostris (Chapuis)	39	10	10
porosus (LeConte)	39	10	10, 514
reticulatus Wood	40		10
rufescens Stephens (= **palliatus** (Gyllenhal))	38		
rufus Marsham (= **palliatus** (Gyllenhal))	38		
rugipennis (Mannerheim)	40	10	10
rugipennis pinifex (Fitch)	40	10	10
***schellwieni** (Hagedorn)	41		
spessivtsevi Eggers	41		10
squamosus Murayama (= **spessivtsevi** Eggers)	41		10
subcostulatus (Mannerheim)	42	10	10
subcostulatus alternans (Chapuis)	42		10
sulcatus Eggers	42		10
tenebrosus Sahlberg (= **glabratus** (Zetterstedt))	33		
transbaicalicus Eggers	42		
tuberculatus Eggers	43		
tuberculatus Schedl (= ***tuberculifer** Wood)	43		
***tuberculifer** Wood	43		
Hylurgus Latreille	119	26	22
elongatus Herbst (= **ligniperda** (Fabricius))	121		
flavipes Panzer (= **ligniperda** (Fabricius))	121		
indicus Wood	119		
ligniperda (Fabricius))	119	26	22
longulus Kolenati (= **ligniperda** (Fabricius))	121		
micklitzi Wachtl	122	26	22
Hyorrhynchini Hopkins	191	36	31
Hyorrhynchus Blandford	191	36	31
birmanus Eggers	191		
blandfordi Sampson	191	36	
drescheri Eggers (= **lewisi** Blandford)	192		

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ebianensis Huang & Yin	191	36	
elongatus Eggers	191		
flavopannus Huang & Yin	192	36	
granulatus Eggers	192		
(= **lewisi** Blandford)			
kalimpongensis Maiti & Saha	192		
lewisi Blandford	192		31
obesus Browne	192		31
sensarmai Maiti & Saha	192		
shiva Maiti & Saha	192		
tuberopectus Huang & Yin	192	36	
unicornis Nobuchi	192		
Hypoborini Nusslin	271	61	39
Hypoborus Erichson	279	64	40
ficus Erichson	280	65	40
siculus Ferrari	281		
(= **ficus** Erichson)			
tanganyikaensis Schedl	281		
Hypocryphalus Hopkins	868	185	133
aciculatus Schedl	868		
afiamalus Schedl	868		
angustior (Eggers)	868		
asper (Broun)	868		
bakeri (Eggers)	868		
basihirtus (Beeson)	868		
bidentatus Browne	868		133
brevior Schedl	868		
caplandicus Schedl	868		
constrictus Schedl	871		
(= **perminimus** (Schedl))			
corpulentus Schedl	868		
cylindripennis Schedl	868		
cylindrus (Browne)	868		
densepilosus Schedl	868		
discrepans Schedl	869		
dubiosus Schedl	869		
fici Browne	869		133
formosanus Schedl	869		
froggatti Nunberg	871		134
(= **perminimus** (Schedl))			
glabratus Schedl	869		
granulatus Schedl	869		
griseus Blackburn	870	185	
(= **mangiferae** (Stebbing))			
imitans Schedl	869		
inops Eichhoff	870		
(= **mangiferae** (Stebbing))			
interponens Schedl	869		
kalambanganus Schedl	869		
laevis Browne	869		133
laticollis Browne	869		
longipilis Browne	869		133
maculatus Browne	872		
(= **sandakanensis** (Schedl))			
malayensis Schedl	869		133
mangiferae (Stebbing)	869	185	133
mangiferae Eggers	870		
(= **mangiferae** (Stebbing))			

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mimicus Schedl (= **mangiferae** (Stebbing))	870		
mindoroensis Schedl	870		
minor Schedl	870		
minutus Browne	871		134
mollis (Schedl)		185	
montanus Schedl	871		
moorei Schedl	871		
nigrosetosus Schedl	871		
nitidicollis Schedl	871		
obesus (Hopkins)	871		
obscurus Hopkins	871		
opacus Schedl (= **mangiferae** (Stebbing))	870		
ovalicollis Schedl	871		
perminimus (Schedl)	871	185	134
pilifer Schedl	871		
piliger Schedl	871		
polynesiae Schedl	871		
reflexus Browne	871		134
rotundus Hopkins	871		
sandakanensis (Schedl)	872		134
spathulatus Schedl	872	185	
striatus Hopkins	872		
subcylindricus Schedl (= **mangiferae** (Stebbing))	870		
sumatranus (Schedl)	872		
tongaensis Schedl	872	185	
triangularis Schedl	872		
tutuilaensis Schedl	872		
Hypothenemus Westwood	904	190	140
abdominalis Hopkins (= **columbi** Hopkins)	913		
aberrans Browne	905		
abruptus (Schedl)	905		
acaciae (Eggers)	906	190	
adscitus (Schedl)	906		
aequaliclavatus Schedl (= **fuscicollis** (Eichhoff))	926		
aethiops (Schedl)	906		
africanus (Hopkins)	906	190	140
agnatus (Eggers)	906	190	140
albipilis Reitter (= **leprieuri** (Perris))	933		
alter Eggers (= **birmanus** (Eichhoff))	910		
alternans Browne (= **criticus** (Schedl))	914		
alternatus (Eggers)	906		
amakusanus (Murayama)	906		
amazonicus Eggers (= **obscurus** (Fabricius))	937		
ampliatus Eggers (= **birmanus** (Eichhoff))	910		
amplipennis Hopkins (= **columbi** Hopkins)	913		
andersoni Wood (= **seriatus** (Eichhoff))	943		

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apatoides Eichhoff (= **tristis** (Eichhoff))	946		
apicalis Wood	906		
approximatus Hopkins (= **interstitialis** (Hopkins))	931		
areccae (Hornung)	906	190	140
argentinensis Schedl (= **eruditus** Westwood)	924		
artocarpi Browne	908		140
arundinis (Eichhoff)	908	191	
asaroriensis Beeson (= **eruditus** Westwood)	924		
ascitus Wood	908	191	
asiminae Hopkins (= **eruditus** Westwood)	922		
asperatus Schedl (= **seriatus** (Eichhoff))	943		
aspericollis Wollaston (= **eruditus** Westwood)	920	193	142
asperulus Eichhoff (= **obscurus** (Fabricius))	937		
ater (Eggers)	908		
aterrimulus Wood	908		
aterrimus (Schedl)	908		
aterrimus Schedl (= **aterrimulus** Wood)	908		
atratus (Schedl)	909		
***aulmanni** Hagedorn	941	196	145, 146
***avitus** Bright & Poinar		197	
balachowskyi Menier	909		
baloghi (Schedl)	909		
bambesanus Eggers (= **areccae** (Hornung))	908		
bambusae Browne	909		
bananensis Eggers (= **javanus** (Eggers))	932		
basjoo Niisima (= **eruditus** Westwood)	921		
bauhaniae Schedl	909		
bauhaniae Schedl (= **areccae** (Hornung))	908		
beameri Wood (= **gossypii** (Hopkins))	926		
bezaziani Peyerimhoff	909	191	
bicinctus Schedl	909		
bicolor Eggers (= **eruditus** Westwood)	923		
bicolor Schedl (= **eruditus** Westwood)	924		
bidens Browne	909		
birmanus (Eichhoff)	909	191	141, 514
biseriatus (Eggers)	910		
bituberculatus Eggers (= **brunneus** (Hopkins))	911		
boieldieui Perroud (= **eruditus** Westwood)	920		
bolivianus (Eggers)	911	191	141

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bradfordi Hopkins	922		
(= **eruditus** Westwood)			
brasiliensis Hopkins	915		
(= **crudiae** (Panzer))			
brevicollis (Eggers)	911		
brevis (Eggers)	911		
brownei Beaver	911		
brunneicollis Hopkins	918		
(= **erectus** LeConte)			
brunneipennis Hopkins	913		
(= **columbi** Hopkins)			
brunneipes Nunberg	912		
(= **camerunus** (Eggers))			
brunneus (Hopkins)	911	191	141
buscki Hopkins	937		
(= **obscurus** (Fabricius))			
californicus Hopkins	912	191	141
camerunus (Eggers)	912		
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(= **areccae** (Hornung))			
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(= **seriatus** (Eichhoff))			
cassiae Eichhoff	937		
(= **obscurus** (Fabricius))			
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(= **birmanus** (Eichhoff))			
ceibae Hopkins	912		
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(= **dissimilis** (Zimmermann))			
citri Ebeling	924		
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(= **hampei** (Ferrari))			
coffeae Hagedorn	930		
(= **hampei** (Ferrari))			
coffeivorus Weele	930		
(= **hampei** (Ferrari))			
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(= **eruditus** Westwood)			
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•*confusus* (Eggers)	913		141
(= **agnatus** Eggers)			
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(= **setosus** (Eichhoff))			
cooki Hopkins	930		
(= **hampei** (Ferrari))			
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(= **fuscicollis** (Eichhoff))			
costatus (Eichhoff)	913		
criticus (Schedl)	913		
crudiae (Panzer)	914	191	141, 514
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cubensis Hopkins (= **erectus** LeConte)	918		
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curtipennis (Schedl)	916	192	
cylindricus Hopkins (= **plumeriae** (Nordlinger))	938	195	
cylindricus Schedl (= **eruditus** Westwood)	924		
cylindraceus (Schedl)	916		
cylindripennis Schedl (= **eruditus** Westwood)	925		
cynometrae Schedl	916		
darwinensis Schedl (= **seriatus** (Eichhoff))	943		
delicatus Schedl	916		
deprecator (Schedl)	916		
depressus Eichhoff (= **setosus** (Eichhoff))	944		
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differens Hopkins (= **crudiae** (Panzer))	915		
dimorphus (Schedl)	916		
dipterocarpi Hopkins	916	192	
discedens Schedl (= **erectus** LeConte)	918		
dissimilis (Zimmermann)	916	192	142, 514
distinctus Wood	917		142
dolichocola Hopkins	917		
dolosus Wood	917	192	514
donisi (Schedl)	917	192	
dorsosignatus (Schedl)	917		
dubiosus Schedl (= **eruditus** Westwood)	924		
dubius (Schedl)	917		
ealaensis Eggers (= **eruditus** Westwood)	925		
ehlersi Eichhoff (= **eruditus** Westwood)	921		
ehlersi rotroui Peyerimhoff (= **eruditus** Westwood)	923		
elaphus (Eichhoff)	917		142
elongatus Hopkins (= **eruditus** Westwood)	923		
emarginatus Schedl (= **obscurus** (Fabricius))	937		
***emmi** (Hagedorn)	918		
emmi Eggers (= ***emmi** (Hagedorn))	918		
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eupolyphagus Beeson (= **areccae** (Hornung))	907		

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fallax Costa Lima (= **crudiae** (Panzer))	915		
farinosus Blandford (= **birmanus** (Eichhoff))	910	191	
ferrugineus Hopkins (= **eruditus** Westwood)	923		
ferrugineus Hopkins (= **multidentatus** (Hopkins))	936		
ficus Hopkins (= **seriatus** (Eichhoff))	942		
fiebrigi Hopkins (= **seriatus** (Hopkins))	942		
fijianus Schedl (= **dorsosignatus** (Schedl))	917		
flavescens Hopkins (= **interstitialis** (Hopkins))	931		
flavicollis Hopkins (= **eruditus** Westwood)	923		
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flavosquamosus Hopkins (= **eruditus** Westwood)	922		
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fungicola Eggers (= **areccae** (Hornung))	907		
fuscicollis (Eichhoff)	926	193	
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georgiae Hopkins (= **seriatus** (Eichhoff))	941		
germari Eichhoff (= **eruditus** Westwood)	921		
ghanaensis Schedl (= **fuscicollis** (Eichhoff))	926		
glabellus Schedl (= **hampei** (Ferrari))	930		
glabratellus Schedl (= **eruditus** Westwood)	925		
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hispidus Eggers (= **areccae** (Hornung))	907		
hivaoea Beeson (= **crudiae** (Panzer))	915		
hopkinsi Browne (= **multidentatus** (Hopkins))	936		
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intersetosus Eggers (= **eruditus** Westwood)	924		
interstitialis (Hopkins)	931	194	144
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ituriensis Schedl (= **plumeriae** (Nordlinger))	939		
japonicus (Niisima)	932		
javanus (Eggers)	932	194	144
juglandis Blackman (= **eruditus** Westwood)	923		
kalshoveni Schedl (= **javanus** (Eggers))	933		
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koebelei Hopkins (= **eruditus** Westwood)	922		
kraunhiae (Murayama)	933		
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lamuensis (Eggers)	933		

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lebronneci Beeson (= **crudiae** (Panzer))	915		
lecontei Hopkins (= **crudiae** (Panzer))	915		
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lineatifrons Hopkins (= **eruditus** Westwood)	922		
lineatus (Eggers)	934		
liquidamberae Wood (= **seriatus** (Eichhoff))	943		
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longipilis (Schedl)	934		144
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macrolobii (Eggers)	934		
maculicollis Sharp (= **birmanus** (Eichhoff))	910		
madagascariensis Schedl	934		
madagascariensis Schedl (= **donisi** (Schedl))	917		
magnus (Eggers)	934		
major Browne	934		
malayensis (Schedl)	934		
mali Hopkins (= **eruditus** Westwood)	922		
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mangarevanus Beeson (= **dipterocarpi** Hopkins)	916		
mangovorus Schedl	934		
marovoayi Schedl (= **seriatus** (Eichhoff))	943		
marshalli (Eggers)	934		144
martiniquensis Eggers (= **areccae** (Hornung))	908		
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mauiensis Schedl (= **eruditus** Westwood)	925	193	
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melasomus (Lea)	935	194	
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minutus Schedl (= **eruditus** Westwood)	925		

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mozambiquensis Eggers	935	195	
mucronifer Wollaston (= **crudiae** (Panzer))	914		
mulongensis (Eggers)	935		
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myristicae Hopkins (= **eruditus** Westwood)	922		
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nanulus Schedl (= **eruditus** Westwood)	925		
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niger Hopkins (= **seriatus** (Eichhoff))	943		
nigricollis Hopkins (= **eruditus** Westwood)	922		
nigripennis Hopkins (= **eruditus** Westwood)	923		
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nitidipennis Hopkins (= **seriatus** (Eichhoff))	942		
nitidulus Hopkins (= **seriatus** (Eichhoff))	943		
novateutonicus (Schedl)	936	195	
oahuensis Schedl (= **areccae** (Hornung))	908		
obesus Hopkins (= **javanus** (Eggers))	932		
obliquus Hopkins (= **interstitialis** (Hopkins))	932		
oblongus (Nobuchi)	936	195	
obscuriceps Schedl (= **eruditus** Westwood)	925		
obscurus (Fabricius)	936	195	145
obscurus Eichhoff (= **setosus** (Eichhoff))	944		
obscurus Ferrari (= **eruditus** Westwood)	920		
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opacifrons Hopkins (= **pubescens** Hopkins)	939		

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opacipennis Hopkins (= **interstitialis** (Hopkins))	932		
opacus (Eichhoff)	937	195	
pacificus Beeson (= **birmanus** (Eichhoff))	910		141
pacificus Bright & Peck (= **insulanus** Bright)			
pallidus Hopkins (= **plumeriae** (Nordlinger))	938		
paradoxus Schedl	938		
paraguayensis Hopkins (= **crudiae** (Panzer))	915		
parallelus (Hopkins)	938	195	
parcius Schedl (= **eruditus** Westwood)	925		
parilis Schedl (= **eruditus** Westwood)	925	193	
parvulus Browne	938	195	
parvus Hopkins (= **eruditus** Westwood)	922		
pecanis Hopkins (= **seriatus** (Eichhoff))	943		
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perhispidus (Eggers)	938		
peritus Blandford (= **birmanus** (Eichhoff))	910		
perkinsi Hopkins (= **birmanus** (Eichhoff))	910		
perpunctatus (Eggers)	938		
philippinensis Hopkins (= **javanus** (Eggers))	932		
pilosus Hopkins	938		
pini Hopkins (= **seriatus** (Eichhoff))	942		
pistor Schedl (= **javanus** (Eggers))	933		
plumeriae (Nordlinger)	938	195	145, 515
polyphagus Costa Lima (= **crudiae** (Panzer))	915		
polyphagus Eggers (= **areccae** (Hornung))	907		
praecellens (Schedl)	939		
prosper Schedl (= **javanus** (Eggers))	933		
pruni Hopkins (= **eruditus** Westwood)	922		
psidii Hopkins (= **birmanus** (Eichhoff))	910		
pubescens Hopkins	939	195	145
pubescens Schedl (= **schedli** Browne)	940		
pubipennis (Eggers)	939		
pulverulentus Eichhoff (= **seriatus** (Eichhoff))	941		
punctatus Eggers (= **hampei** (Ferrari))	930		
puncticollis Hopkins (= **erectus** LeConte)	918		

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punctipennis Hopkins (= **eruditus** Westwood)	923		
pusillus Eggers (= **eruditus** Westwood)	923		
pygmaeus Hopkins (= **eruditus** Westwood)	923		
quadridentatus Hopkins (= **interstitialis** (Hopkins))	932		
quercus Hopkins (= **rotundicollis** (Eichhoff))	940		
rotundicollis (Eichhoff)	939		145, 515
robustus Blackman (= **seriatus** (Eichhoff))	943		
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ruficeps Perkins	940	196	
rufopalliatus Hopkins (= **columbi** Hopkins)	913		
rugifer (Schedl)	940		
rugifer Schedl (= **ruginosus** Wood)	940		
ruginosus Wood	940		
rumseyi Hopkins (= **eruditus** Westwood)	922		
sacchari Hopkins (= **eruditus** Westwood)	922		
salicis Hopkins (= **seriatus** (Eichoff))	942		
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sapporoensis (Niisima)	940		
sassaensis (Eggers)	940		
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schwarzi Hopkins (= **eruditus** Westwood)	922		
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scutiae (Schedl)	940		
seoulensis Choo & Woo	940		
seriatus (Eichhoff)	940	196	145
setosus (Eichhoff)	943	196	145
similis Hopkins (= **sparsus** Hopkins)	945		
simoni (Reitter)	944		
sobrinus (Schedl)	944		
socialis (Schedl)	944	196	
solitarius (Schedl)	944	196	
solocis Wood	945		
soltaui Hopkins (= **seriatus** (Eichhoff))	942		
soussouensis Eggers (= **mallyi** (Hopkins))	934		
sparsedentatus (Schedl)	945		
sparsus Hopkins	945		
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spinosus (Schedl)	945		

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(= **elaphus** (Eichhoff))			
squamosus (Hopkins)	945	196	146, 515
sterculiae Hopkins	910		
(= **birmanus** (Eichhoff))			
stigmosus (Schedl)	945		
striatopunctatus Lea	921		
(= **eruditus** Westwood)			
striatulus Browne	911		
(= **brownei** Beaver)			
striatulus Schedl	943		
(= **seriatus** (Eichhoff))			
styrax (Schedl)	945		
subacuminatus (Schedl)	945		
subagnatus Eggers	933		
(= **javanus** (Eggers))			
subconcentralis Hopkins	923		
(= **eruditus** Westwood)			
subcylindricus Eggers	924		
(= **eruditus** Westwood)			
subelongatus Hopkins	939		
(= **pubescens** Hopkins)			
subglabratus Schedl	908		
(= **areccae** (Hornung))			
subopacicollis Hopkins	943		
(= **seriatus** (Eichhoff))			
subvestitus Eggers	907		
(= **areccae** (Hornung))			
sundaensis Eggers	926		
(= **fuscicollis** (Eichhoff))			
suspectus Wood	946	196	146
taihokuensis (Schedl)	946		
tantillus Lea	921		
(= **eruditus** Westwood)			
tamarindi Hopkins	942		
(= **seriatus** (Eichhoff))			
tectonae Stebbing	921		
(= **eruditus** Westwood)			
tenuis Hopkins	922		
(= **eruditus** Westwood)			
teretis Wood	946	196	146
teteforti (Menier)	946		
texanus Hopkins	942		
(= **seriatus** (Eichhoff))			
theobromae Eggers	933		
(= **liberiensis** (Hopkins))			
thoracicus Hopkins	912		
(= **californicus** Hopkins)			
tigrensis Schedl	925		
(= **eruditus** Westwood)			
tonsus Eggers	943		145
(= **aulmanni** (Hagedorn))			
transatlanticus Eggers	939		
(= **plumeriae** (Nordlinger))			
tredli (Reitter)	946		
tridentatus Hopkins	945		
(= **sparsus** Hopkins)			
trinitatis (Hopkins)	946	197	

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tritici Hopkins (= **californicus** Hopkins)	912		
trivialis Wood	946	197	
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tuberosus (Schedl)	946		
•*tungamwansolus* (Schedl) (= **agnatus** Eggers)	946		146
unicolor Hopkins (= **eruditus** Westwood)	923		
uniseriatus Eggers (= **crudiae** (Panzer))	915		
uter Eggers (= **birmanus** (Eichhoff))	910		
vafer Blandford (= **areccae** (Hornung))	907		140
validus Blandford (= **erectus** LeConte)	918		
validus valens Sampson (= **birmanus** (Eichhoff))	910		
vesculus Wood	946		
vianai Schedl (= **eruditus** Westwood)	925		
virentis Hopkins (= **seriatus** (Eichhoff))	942		
vitis Browne	946		
vulgaris Schaufuss (= **seriatus** (Eichhoff))	941	196	145
webbi Hopkins (= **eruditus** Westwood)	922		
winkleri (Reitter)	946		
xanthophloeae (Schedl)	946		
zeae Schedl (= **californicus** Hopkins)	912		

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aceris (Niisima)	648		100
ashuensis (Murayama) (= **majus** (Eggers))	632		97
•*dainichiensis* (Murayama) (= **aceris** (Niisima))	648		100
intermedius (Sampson)	648	140	100
machili Wood	648		
majus (Eggers)	648		
malaisei Eggers (= **intermedius** (Sampson))	948		
pasohensis Beaver			101
pubipennis (Blandford)	648		100
•*sinensis* (Eggers) (= **sordidus** (Blandford))	649		100
sordidus (Blandford)	649		100
tropicus (Browne)	649		100
Ipini Bedel	438	99	65
Ips DeGeer	484	108	73
acuminatus (Gyllenhal)	485	108	73

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(= **tridens engelmanni** Swaine)			
amitinus (Eichhoff)	489	108	74
amitinus montanus Fuchs	491		74
(= **amitinus** (Eichhoff))			
apache Lanier	491		
avulsus (Eichhoff)	491	109	74
blandfordi Stebbing	527		
(= **stebbingi** Strohmeyer)			
bonanseai (Hopkins)	492	109	75
borealis Swaine	493	109	75
borealis lanieri Wood	494		
borealis swainei Hopping	493		
borealis thomasi Hopping	493		
cacographus LeConte	508		
(= **grandicollis** (Eichhoff))			
calligraphus (Germar)	494	109	75
cembrae (Heer)	497	109	75
chagnoni Swaine	508		
(= **grandicollis** (Eichhoff))			
chamberlini Swaine	500		
(= **concinnus** (Mannerheim))			
chinensis Kurenzov & Kononov	500		
cloudcrofti Swaine	509		
(= **grandicollis** (Eichhoff))			
confusus (LeConte)	500	110	76
cribricollis Eichhoff	508	111	77
(= **grandicollis** (Eichhoff))			
dubius Swaine	528		
(= **tridens engelmanni** Swaine)			
duplicatus (Sahlberg)	502	110	76
emarginatus (LeConte)	503	110	77
exesus Say	496		
(= **calligraphus** (Germar))			
fallax Eggers	499		
(= **cembrae** (Heer))			
geminatus Zetterstedt	489		
(= **acuminatus** (Gyllenhal))			
grandicollis (Eichhoff)	506	111	77
guildi Blackman	511		
(= **latidens** (LeConte))			
hauseri Reitter	509	111	77
heydeni Eichhoff	489		
(= **acuminatus** (Gyllenhal))			
hirsutus Eichhoff	500		
(= **concinnus** (Mannerheim))			
hoppingi Lanier	509	111	77
hudsonicus LeConte	516		
(= **perturbatus** (Eichhoff))			
hunteri Swaine	509		
infucatus Eichhoff	503		
(= **duplicatus** (Sahlberg))			
integer (Eichhoff)	509	111	77
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(= **perturbatus** (Eichhoff))			
interruptus Mannerheim	527		81
(= **tridens** Mannerheim			

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(= **calligraphus** (Germar))		109	
judeichi Kirsch	503		
(= **duplicatus** (Sahlberg))			
knausi Swaine	510		
laticollis Swaine	521		
(= **pini** (Say))			
latidens (LeConte)	510	111	78
lecontei Swaine	511	112	78
longidens Swaine	511	112	
(= **latidens** (LeConte))			
longifolia (Stebbing)	511	112	
mannsfeldi (Wachtl)	512	112	78
montanus (Eichhoff)	513		78
nitidus Eggers	514	112	78
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(= **typographus** (Linnaeus))			
oregonis Eichhoff	520		
(= **pini** (Say))			
paraconfusus Lanier	514	112	78
perroti Swaine	515	112	
pertubatus (Eichhoff)	515	112	79
pilifrons Swaine	516		
pilifrons sulcifrons Wood	517		
pilifrons thatcheri Wood	517		
pilifrons utahensis Wood	517	113	
pinastri Bechstein	525		
(= **sexdentatus** (Boerner))			
pini (Say)	517	113	79
plastographus (LeConte)	521		80
plastographus maritimus Lanier	521		80
plastographus plastographus (LeConte)	521	113	80
ponderosae Swaine	497		
(= **calligraphus** (Germar))			
praefrictus Eichhoff	520		
(= **pini** (Say))			
praemorsus Eichhoff	496		
(= **calligraphus** (Germar))			
radiatae Hopkins	513		
(= **mexicanus** (Hopkins))			
rectangulus Ferrari	505		
(= **erosus** (Wollaston))			
rectus LeConte			
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(= **stebbingi** Strohmeyer)			
robustus (Knotek)	522	113	
sabinianae Hopping	526		
(= **spinifer** (Eichhoff))			
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(= **tridens engelmanni** Swaine)			
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(= **sexdentatus** (Boerner))			

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(= **sexdentatus** (Boerner))			
*__subelongatus__ Motschulsky	499	110	76
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(= **robustus** (Knotek))			
typographus (Linnaeus)	528	114	81
typographus japonicus Niisima	538	116	83
(= **typographus** (Linnaeus))			
ussuriensis Reitter	538		83
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(= **hederae** (Schmidt))			

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(= **sordicauda** (Motschulsky))			
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(= **concisus** (Blandford))			
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(= **ingens** (Eichhoff))			
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bicolor Wood	1051		
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bicoloratum Wood	1051		
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bifidus Bright			
(= **querneum** Wood)	1062		
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bisetosus Schedl	1054	221	
(= **egenum** (Blandford))			
bispinum (Blandford)	1052	220	
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(= **chapuisi** Kirsch)			
bolivianum Schedl	1052		
(= **boliviensis** Wood)			
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(= **scutellare** (LeConte))	1062		
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dentatum (Eggers)	1053		
dentatum Eggers	1053		
(= **dentatulum** Wood)			
dentatum Eggers	1053		
(= **denticulatum** Wood)			
denticulatum Wood	1053		
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(= **hagedorni** (Schedl))			
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gracilicornum Schedl (= **exornatum** (Schedl))	1055		
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(= **proximus** (Eichhoff))			
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(= **obanus** Hagedorn)			
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(= **frontalis** (Fabricius))			
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(= **punctatorugosus** Chapuis)			
caelatus Blanchard	100		
(= **scaber** Erichson)			
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(= **rudis** Erichson)			
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(= **punctatorugosus** Chapuis)			
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(= **scaber** Erichson)			
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(= **asper** Erichson)			
procerus (Erichson)	99		
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punctatus (Schedl)	100		
radulosus Blandford	98		
(= **cristatus** Chapuis)			
rudis Erichson	100	22	19
rugatus Blandford	98		
(= **asper** Erichson)			
rugipennis Eggers	100		19
(= **rudis** Erichson)			
scaber Erichson	100	22	
sericeus Chapuis	100		
(= **scaber** Erichson)			
signatus Strohmeyer	101		
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(= **signatus** Strohmeyer)			
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(= **procerus** (Erichson))			
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andresi Eggers	241		
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(= **bidentatus** (Herbst))			
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(= **bidentatus** (Herbst))			
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(= **irkutensis** Eggers)			
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abietinus Wood	978		150
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(= **opaculus** LeConte)			
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(= **opacus** Blackman)			
aceris Knotek	338		
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(= **aratus** Blandford)			
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(= **dahuricus** Chapuis)			
amazonicus Schedl	322		
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amygdali rufipennis Brancsik	323		
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(= **amygdali** Guerin–Meneville)			
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(= **rugulosus** (Muller))			
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azerbaidzhanicus Michalski	324	75	
aztecus Wood	324		48
balcanicus Eggers	327		
(= **carpini** (Ratzeburg))			
barbatus Schedl	325		
barinensis Wood	325		
belokanicus Stark	325	75	
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(= **mali** (Bechstein))			
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carya Riley (= **quadrispinosus** Say)	361		
caryae Walsh (= **quadrispinosus** Say)	361		
castaneus Ratzeburg (= **mali** (Bechstein))	344		
caucasicus Butovitsch (= **rugulosus** (Muller))	370		
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chikisanii Niisima	327	75	48
claviger Blandford	328	75	48
confusus Eggers (= **japonicus** Chapuis)	335		50
conidens Browne	328		
convexus Schedl	328		
costellatus Chapuis	328	75	
cristatus Wood	328	75	
curviventralis Niisima (= **chikisanii** Niisima)	327		
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fagi Walsh	330	76	
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flavicornis Chevrolat (= **multistriatus** (Marsham))	353		
formosanus Eggers (= **frontalis** Blandford)	331		
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intricatus (Ratzeburg)	331	76	49
iranicus Eggers (= **eichhoffi** Reitter)	329		
jacobsoni (Spessivtsev)	334	77	49
japonicus Chapuis	335	77	49
jaroschewskii Schevyrew	335	77	50
javanus Chapuis (= **multistriatus** (Marsham))	353		
kashmirensis Schedl	336		
kirschi Skalitzky	336	77	50
koenigi Schevyrew	337	78	50
koltzei Reitter	338		50
kononovi Kurenzov (= **semenovi** (Spessivtsev))	376		
kostini Sokanovskii (= **jaroschewskii** Schevyrew)	336		
kozikowskii Michalski	338	78	
laetus Wood	339		
laevis Chapuis	339	78	50
laricis Blackman	340	78	50
lenkoranus Eggers (= **intricatus** (Ratzeburg))	334	77	
leonii Eggers (= **sulcifrons** Rey)	378		
lineatus Kurenzov (= **ratzeburgi** Janson)	364		
loevendali Eggers (= **laevis** Chapuis)	340		
major Stebbing	340	78	
mali (Bechstein)	341	78	50
mandli Eggers (= **japonicus** Chapuis)	335		50

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(= **chikisanii** Niisima)			
manglissiensis Lezhava	370		
(= **rugulosus** (Muller))			
marginatus Chapuis	344		
mediterraneus Eggers	369		53
(= **rugulosus** (Muller))			
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(= **major** Stebbing)			
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morawitzi Semenov	345	79	51
multistriatus (Marsham)	345	79	51
mundus Wood	354		51
muticus Say	354	80	51
nakanei Nobuchi	354		
neofacialis Schedl	354		
nevermanni Schedl	354	80	
niger Geoffroy	375		
(= **scolytus** (Fabricius))			
nitidulus Chapuis	344		
(= **mali** (Bechstein))			
nitidus Schedl	354	80	
nodatus Wood	354	80	
nodicornis Wichmann	355		52
(= **nodulus** (Wichmann))			
nodifer Reitter	353		
(= **multistriatus** (Marsham))			
nodulus (Wichmann)	355		52
novateutonicus Schedl	355	80	
noxius Ratzeburg	359		
(= **pygmaeus** (Fabricius))			
numidicus Brisout	355	80	52
nunbergi Michalski	355		52
obelus Wood	355		
opacus Blackman	355	80	52, 519
oregoni Blackman	355	80	
orientalis Eggers	353	80	
(= **multistriatus** (Marsham))			
papuanus Schedl	353		
(= **multistriatus** (Marsham))			
parviclaviger Yin & Huang	356	80	
penicillatus Reitter	334		
(= **intricatus** (Ratzeburg))			
penicillus Schedl	357		
(= **propinquus** Blandford)			
peregrinus Eggers	357		
(= **carpini** (Ratzeburg))	327		
peruensis Schedl	356		
piceae (Swaine)	356	80	52
picicolor Stephens	334		
(= **intricatus** (Ratzeburg))			
pilosus Yin & Huang	356	80	
pini Eggers	345		51
(= **morawitzi** Semenov)			
pinnatus Eggers	356		
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(= **claviger** Blandford)			
***poinari** Bright		84	

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possyeti Stark	329		
(= **dahuricus** Chapuis)			
praeceps LeConte	357		
productus Hagedorn	344		
(= **marginatus** Chapuis)			
propinquus Blandford	357	81	
proximus Chapuis	357	81	
pruni Ratzeburg	342	79	
(= **mali** (Bechstein))			
pseudocaudatus Eggers	327		
(= **caudatus** Eggers)			
pseudocosellatus Schedl	357		
pubescens Stark	357		52
pubescens Eggers	358		
(= **pubescens** Stark)			
punctatus Muller	374		
(= **scolytus** (Fabricius))			
punctatus Ratzeburg	369		
(= **rugulosus** (Muller))			
pygmaeus (Fabricius)	358	81	52
pyri Ratzeburg	343		
(= **mali** (Bechstein))			
quadrispinosus Say	359	81	52, 520
querci Yin & Huang	361	81	
ratzeburgi Janson	361	81	52
reflexus Blackman	364		
rimskii Kurenzov	334		
(= **jacobsoni** (Spessivtsev))			
robustus Blackman	364		
rugulosus (Muller)	364	81	53
rugulosus baluchistani Schedl	370		
(= **rugulosus** (Muller))			
rugulosus intermedius Sokanovskii	370		
(= **rugulosus** (Muller))			
rugulosus samarkandicus Butovitsch	370		
(= **rugulosus** (Muller))			
rugulosus santaluciae Hoffmann	370		
(= **rugulosus** (Muller))			
rugulosus similis Butovitsch	370		
(= **rugulosus** (Muller))			
sachalinensis Michalski	330		
(= **esuriens** Blandford)			
sahlbergi Eggers	363		
(= **ratzeburgi** Janson)			
schevyrewi Semenov	370	82	53
scolythus Sulzer	374		
(= **scolytus** (Fabricius))			
scolytus (Fabricius)	371	82	53
semenovi (Spessivtsev)	376		54
seulensis Murayama	371		53
(= **schevyrewi** Semenov)			
shanhaiensis Yin & Huang	376	83	
sibiricus Eggers	363		
(= **ratzeburgi** Janson)			
siculus Eggers	338		
(= **koenigi** Schevyrew)			

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(= **hermosus** Wood)			
simmeli Eggers	334		
(= **intricatus** (Ratzeburg))			
sinopiceus Tsai	376	83	54
sobrinus Blackman	380		
(= **unispinosus** LeConte)			
spinidens Schedl	377		
squamosus Yin & Huang	377	83	
starki Kurenzov	335		
(= **japonicus** Chapuis)			
strigipennis Schedl	377		
subconfusus Eggers	335		
(= **japonicus** Chapuis)			
submarginatus Schedl	377	83	54
subscaber LeConte	377	83	
sulcatus LeConte	344		
(= **mali** (Bechstein))			
sulcifrons Rey	377	83	54
tadzhikistanicus Stark	378	83	54
tauricus Eggers	336		
(= **jaroschewskii** Schevyrew)			
taxicola Lezhava	370		
(= **rugulosus** (Muller))			
therondi Hoffmann	353		
(= **multistriatus** (Marsham))			
thoracicus Chapuis	378		54
tiburtinus Claus	334		
(= **intricatus** (Ratzeburg))			
torulus Wood	378	83	
transcaspicus Eggers	371		
(= **schevyrewi** Semenov)			
transversalis Eggers	378		
***triarmatus** (Eggers)	376	83	54, 55
trispinosus Strohmeyer	378		54
tsugae (Swaine)	378	83	54
ulmi Redtenbacher	353		
(= **multistriatus** (Marsham))			
unispinosus LeConte	379	84	54
unispinosus Schevyrew	336		
(= **jaroschewskii** Schevyrew)			
ussuriensis Kurenzov	335		
(= **japonicus** Chapuis)			
varshalovitchi Michalski	380	84	54
ventralis LeConte	380	84	55
ventrosus Schevyrew	382		55
vexator Reitter	338		
(= **koltzei** Reitter)			
virgatus Bright	382		55
wickhami Blackman	364		
(= **reflexus** Blackman)			
yablonianus Murayama	382		
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Serrastus Nunberg	283	65	40
ivoriensis Nunberg	283		40
(= **similis** (Eggers))			
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destructor Eggers	105	24	
(= **porteri** Brethes)			
porteri Brethes	105	24	20
Spermophthorus Costa Lima	971	203	149
aberrans Wood	971	203	
apuleiae Costa Lima	971	203	149
caesalpiniae Blackman	971		
vianai Schedl	971		
(= **apuleiae** Costa Lima)			
Sphaerotrypes Blandford	198	38	32
assamensis Stebbing	201	39	
(= **siwalikensis** Stebbing)			
bangensis Eggers	198		
barbatus Hagedorn	198		
bengalensis Wood	198		
bicolor Eggers	198		
biseriatus Schedl	198		
blandfordi Schaufuss	198		
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brevisetosus Browne	198	38	
brunneus Heymons	198	38	
bryanti Browne	198	38	
carinatus Eggers	199	38	
carpini Eggers	199		
coimbatorensis Stebbing	199	38	32
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(= **kurenzovi** Nunberg)			
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•*palmi* Hansen	846	180	128, 129
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Family Platypodidae Index

(for 1992 catalog, Supplement 1, and Supplement 2)

The following index is a complete list of every generic name presently recognized as valid and every species (and their synonyms) of Platypodidae referred to in the original 1992 catalog, the first supplement, and in the present supplement. Fossil species are indicated by an "*". A closed circle "•" indicates taxons that were either recognized as **valid** in the 1992 catalog, but are now recognized as *synonyms* or taxons that were regarded as *synonyms* in the 1992 catalog, but are now recognized as **valid**. Generic synonyms are not included unless they were validated after 1992. All generic synonyms are listed in the index at the end of the 1992 catalog.

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pallidipennis (Blandford)	1164		179, 205
percomis (Schedl)	1169		179, 205
perdifficilis Schedl (= **subitarius** Schedl)	1186		
perdilligens (Schedl)	1169		179, 205
ratzeburgi (Chapuis)	1176		180, 205
striatopennis (Schedl)	1185		182, 205
subitarius (Schedl)	1186		182, 205
ustulatus (Chapuis)	1191		184, 205
Tesserocerinae Blandford	1088	233	163
Tesserocerini	1097	238	164
Tesserocerus Saunders	1097	238	165
affinis Guerin–Meneville (= **retusus** Guerin–Meneville)	1100		
alternantes Schedl	1098		
aubei Chapuis (= **dewalquei** Chapuis)	1098		
belti Sharp	1098		165
bihamatus Guerin–Meneville (= **insignis** (Saunders))	1100		
bilobus (Schedl)	1098		

	1992 catalog	Supplement 1	Supplement 2
brasiliensis Evers	1098		
chapuisi Schedl	1098		165
contractus Chapuis	1098		
dejeani Chapuis	1098		
(= **dewalquei** Chapuis)			
despectus Schedl	1098		
dewalquei Chapuis	1098		
elegans Chapuis	1098		166
ericius Blandford	1099		
forceps Wood	1099		
forcipatus Schedl	1099		
forficulus (Schedl)	1099		
fronteproductus Schedl	1099		
gebieni Evers	1099		
guerini Chapuis	1099		
guerini montanus Schedl	1099		
(= **guerini** Chapuis)			
inermis Guerin–Meneville	1099		
insignis (Saunders)	1099		
linearis Chapuis	1100		
morsi Chapuis	1100		
obsoletus Chapuis	1191		
(= **ustulatus** Chapuis)			
obtusus Chapuis	1100		
(= **procer** (Erichson))			
petersi Chapuis	1191		
(= **ustulatus** Chapuis)			
***primus** Bright & Poinar		238	
procer (Erichson)	1100		
productus Shuckard	1100		
quadridens Schedl	1100		
retusus Guerin–Meneville	1100		
rudis Chapuis	1100		
schmutzenhoferi Schedl	1100		
simulatus Schedl	1100		
spinax Blandford	1100		166, 522
spinolae Chapuis	1101		
ursus Schedl	1100		
(= **insignis** (Saunders))			
ustulatus Shuckard	1101		
vegrandis Schedl	1101		
(= **spinolae** Chapuis)			
Tesserocranulus Schedl	1101		166
nevermanni Schedl	1101		166, 523
Trachyostus Schedl	1211	255	187
antongilis Schedl	1211		
ater (Strohmeyer)	1211		187
aterrimus (Schaufuss)	1211		187
aterrimus minor Roberts	1211		
(= **aterrimus** (Schaufuss))			
carinatus Schedl	1211		
decellei Schedl	1211		
fecundus (Sampson)	1211		
fecundus ovalis Schedl	1211		
(= **fecundus** (Sampson))			
fecundus transversus Schedl	1211		
(= **fecundus** (Sampson))			
ghanaensis Schedl	1211	255	187

	1992 catalog	Supplement 1	Supplement 2
interstitialis Schedl	1212		
nobilis (Schaufuss)	1212		
punctatus Strohmeyer (= **nobilis** (Schaufuss))	1212	256	187
schaufussi (Strohmeyer)	1212		187
schaufussi major Schedl (= **schaufussi** (Strohmeyer))	1212		
schaufussi medius Schedl (= **schaufussi** (Strohmeyer))	1212		
schaufussi minor Schedl (= **schaufussi** (Strohmeyer))	1212		
schoutedeni (Schedl)	1212		
similis Nunberg	1212		188
tomentosus (Strohmeyer)	1212		188
ugandensis Nunberg (= **schaufussi** (Strohmeyer))	1212		188
vastus Strohmeyer (= **aterrimus** (Schaufuss))	1211		187
Treptoplatypus Schedl	1194	253	184
abietis (Wood)	1114		169, 184
artesolidus (Schedl)	1118	240	184
australis (Chapuis)	1118	240	170, 184
bifidus (Schedl)		241	
biflexuosus (Schedl)	1120		171, 184
canaliculatus (Schedl)	1123		171, 185
caudatus Motschulsky (= **solidus** Walker)	1183		
caviceps (Broun)	1124	242	171, 185
circulicauda Browne	1194	253	
cordatus Motschulsky (= **solidus** Walker)	1183		
crenatus Chapuis (= **australis** Chapuis)	1119		
fastuosus Schedl (= **multiporus** Schedl)	1195		
fischeri (Strohmeyer)	1194		
franciai (Browne)	1141	244	185
hirtus (Schedl)	1146		185
lobatus Broun (= **caviceps** Broun)	1124		
longecaudatus Nunberg (= **micrurus** Schedl)	1157		
micrurus (Schedl)	1157		177, 185
multiporus Schedl	1194		
oxyurus (Dufour)	1163	248	179, 185
pasohensis (Schedl)	1217		185
pilifrons Chapuis (= **solidus** Walker)	1183		
quadriporus Schedl	1195		
sandakanensis (Browne)	1178	250	185
solidulus (Browne)	1182	251	182, 185
solidus (Walker)	1182	251	182, 185
solidus exilis Chapuis (= **solidus** Walker)	1183		
solidus obtusus Chapuis (= **solidus** Walker)	1183		
solidus rudis Chapuis (= **solidus** Walker)	1184		

	1992 catalog	Supplement 1	Supplement 2
subaplanatus (Schedl)	1195		
trepanatus (Chapuis)	1195	253	
wilsoni (Swaine)	1194	253	184, 185
Triozastus Schedl	1219	256	189
banghaasi (Schaufuss)	1220	256	
bifurcus Schedl (= **banghaasi** (Schaufuss))	1220		
brevidens Browne	1220		
brownei Beaver	1220		
caliginosus Roberts	1220		
caliginosus humilis Browne (= **caliginosus** Roberts)	1220		
dubiosus Schedl (= **marshalli** (Sampson))	1221		
elongatus Schedl	1220		
handeniensis Nunberg (= **banghaasi** (Schaufuss))	1220		
marshalli (Sampson)	1220		
pertenuis Schedl (= **marshalli** (Sampson))	1221		
propatulus Schedl (= **marshalli** (Sampson))	1221		
pilosulus (Schedl)	1221		

	1992 catalog	Supplement 1	Supplement 2
Incertae Sedis			
ferrarae Kohring & Schlüter		259	

Note added in proof:

Add species: *Amasa kenchingtoni* Beaver, 1995, p. 13.

Xyleborus touotai Beaver, 1995, p. 15.

Hypothenemus kamathi Beaver, 1995, p. 16.

Add synonymy: *Xyleborus abruptoides* Schedl, 1955 (= *Xylosandrus difficilis* (Eggers), 1923), Beaver 1995, p. 17.

Appendix

New locality records of Scolytidae and Platypodidae (Coleoptera)

The following notes document the new country records of Scolytidae and Platypodidae encountered while preparing this supplement and noted in the main body of this supplement and also provides details of many (but not all) of the new country records recorded in Supplement 1; these latter records are indicated by the reference "Bright & Skidmore 1997". Because we are unable to now document some of the new country records reported in Supplement 1, we feel it best to delete those records until they can be documented by reexamining specimens.

The museum or collection where the specimen(s) are held is indicated by the following acronyms:

CASC — California Academy of Sciences, San Francisco.

CSFPQ — Canadian Forest Service, St. Foy, Quebec.

CNCI — Canadian National Collection of Insects, Ottawa, Ontario.

MZUF — Museo Zoologico "La Specola", Firenze, Italy.

NHMB — National History Museum, Budapest, Hungary.

NSMNH — Nova Scotia Museum of Natural History, Halifax.

RJRC — Robert J. Rabaglia collection, Annapolis, Maryland.

SBPC — Collection of S. Peck, Carleton University, Ottawa, Ontario.

SEMC — Snow Entomological Museum, University of Kansas, Manhattan.

UBC — University of British Columbia, Vancouver.

USNM — United States National Museum of Natural History, Washington, D.C.

Scolytidae

Ambrosiodmus rusticus (Wood)

FRENCH GUIANA: Cayenne, 33.5 km S and 8.4 km NW of Hwy. N2 on Hwy. D5, 4°48′18″N, 52°28′41″W, 30 m, 26–28 May 1997, J. Ashe, R. Brooks, ex. flight intercept trap (1, CNCI).

GUATEMALA: **Zacapa**, 3.5 km SE La Union, 1500 m, 23–25.June 1993, R. Brooks & J. Ashe, flight intercept trap (1, SEMC).

HONDURAS: F. Morazán, 30 km E Tegucigalpa, Cerro Uyuca, 27.V.1994, 1800 m, H. & A. Howden, malaise trap, cloud forest (1, CNCI).

Amphicranus belti Blandford

PANAMA: **Chiriqui**, 2 km north Sta. Clara, 3300 ft., 8°51′N, 82°36′W, Hartmann's Finca, 24–25.V.77, H. & A. Howden (1, CNCI) (Bright & Skidmore 1997:217).

Amphicranus brevipennis Blandford

MEXICO: **Veracruz**, Dos Amates, 5.V.69, D.E. Bright (6, CNCI); **Chiapas**, El Bosque, 3.VII.1969, D.E. Bright (2, CNCI); Ocozocoatula, 2.VII.1969, D.E. Bright (3, CNCI) (Bright & Skidmore 1997:217).

Amphicranus tenuis Blandford

COLOMBIA: Anchicaya, 1000′, 21.VII.1970, J.M. Campbell (1, CNCI) (Bright & Skidmore 1997:219).

Amphicranus thoracicus Erichson

COLOMBIA: Anchicaya, 1000′, VII.21.1970, J.M. Campbell (1, CNCI) (Bright & Skidmore 1997:219).

Araptus aztecus (Wood)

MEXICO: **Veracruz**, Xalapa, 29.VII.83, *Nectandra* sp., F.A. Noguera (3, CNCI) (Bright & Skidmore 1997:198).

Araptus fossifrons Wood

MEXICO: **Morelos**, Texcal, Tepoztlan, 19 Marzo 1983, 1720 m, Saucedo Burgos M., *Marsdenica mexicana* (4, CNCI) (Bright & Skidmore 1997:199).

Araptus hymenaeae (Eggers)

HONDURAS: **Zamorano**, Francisco Morazán, 30.VI.1994, 14°N,87°W, 820 m, Ashe, Brooks, ex: rotting breadfruit (6, CNCI).

Araptus laudatus Wood

MEXICO: **Oaxaca**, Uxpanapa, 300 m, 26.V.81, Armando Equihua (20, CNCI) (Bright & Skidmore 1997:200).

Araptus leptus (Bright)

MEXICO: **Jalisco**, Estacion de Biologia, Chamela, 20,VIII.82, A. Equihua (8, CNCI) (Bright & Skidmore 1997:200).

Carphoborus pinicolens Wood

MEXICO: **Baja California Sur**, Sierra La Laguna, 1770–1850 m, 1.IX.1977, E. Fisher, R. Westcott (5, CASC).

Chramesus asperatus Schaeffer

UNITED STATES: **California**, San Bernardino Mtns., 6000′, *Amorpha californica* (5, CNCI) (Bright & Skidmore 1997:59).

Chramesus chapuisi LeConte

UNITED STATES: **Oklahoma**, Latimer Co., VI.1983, K. Stephan (3, CNCI) (Bright & Skidmore 1997:59).

Chramesus opacicollis Eggers

DOMINICA: Clarke Hall, 1–10 Mar. 1965, W.W. Wirth, light trap (1, USNM) (Bright & Skidmore 1997:60).

Chramesus rotundatus (Chapuis)

MARTINIQUE: Diamant, June 17, 1960, P. & C. Vaurie (1, CNCI).

PUERTO RICO: Cabo Rojo, Dic. 1960, Ramonita Cotte (1, CNCI) (Bright & Skidmore 1997:60).

Cnemonyx opacus Wood

MEXICO: **Chiapas**, Palenque, V.7–9.1969, Bright & Campbell (1, CNCI).

PANAMA: **Coclé**, 3 mi E Rio Hato,18 Apr. 1970, H.P. Stockwell (1, CNCI) (Bright & Skidmore 1997:73).

Cnemonyx squamifer Wood

MEXICO: **Campeche**, Escarcega, light trap, 1.VI.1962, F. Islas S. (1, USNM) (Bright & Skidmore 1997:73).

Coccotrypes advena Blandford

DOMINICAN REPUBLIC: **San Cristobal**, Borbon Cuevas Pomier, 200 m, 13–28.VII.95, trop. decid. for. FIT, S. & J. Peck (4, CNCI); **LaVega**, 10 km NE Jarabacoa, Hotel Montana, forest FIT, 550 m, 18.VII–4.VIII.95, S. & J. Peck (1, SBP).

Coccotrypes carpophagus (Horning)

DOMINICAN REPUBLIC: **San Cristobal**, Borbon Cuevas Pomier, 200 m, 13–28.VII.95, trop. decid. for. FIT, S. & J. Peck (6, CNCI; 9,SBP).

TOBAGO: 10 km NE Roxborough, Gilpin Trail, 26–31.VI.93, 400–500 m, montane rain forest FIT, S. & J. Peck (1, CNCI; 1, SBP).

Coccotrypes cyperi (Beeson)

DOMINICAN REPUBLIC: **LaVega**, 10 km NE Jarabacoa Hotel Montana, forest FIT, 550 m, 18.VII–4.VIII.95, S. & J. Peck (1, SBP).

Coccotrypes distinctus (Motschulsky)

DOMINICAN REPUBLIC: **San Cristobal**, Borbon Cuevas Pomier, 200 m, 13–28.VII.95, trop. decid. for. FIT, S. & J. Peck (1, SBP).

Conophthorus conicolens Wood

MEXICO: **Michoacan**, Los Cocinas, 2200 m, 25.II.80, T.H. Atkinson (15, CNCI) (Bright & Skidmore 1997:201).

Conophthorus edulis Hopkins

MEXICO: **Nuevo Leon**, El Drito, Galeana, 2350 m, VII.1985, J. Flores, coll. (8, CNCI) (Bright & Skidmore 1997:201).

Conophthorus mexicanus Wood

GUATEMALA: **Zacapa**, 5–8 km north of San Lorenzo, 10.V.1993, 1800–2000 m, H. & A. Howden (1, CNCI).

Coptoborus catulus (Blandford)

PERU: **Tambopata**, 15 km NE Pto. Maldonado, 28 June 1989, J.S. Ashe, R.A. Leschen, flight intercept (1, SEMC).

Coptoborus pseudotenuis (Schedl)

TRINIDAD: Arima Valley, 800–1200 ft., Feb. 10–22, 1964 (1, CNCI).

Corthylocurus aguacatensis (Schedl)

MEXICO: **Guerrero**, Chilpa, 1800 m, 23.II.82, Atkinson & Equihua (8, CNCI) (Bright & Skidmore 1997:226).

Corthylus cecropii Wood

COLOMBIA: Magd., San Lorenzo, 41 km S Sta. Marta, 7000′, Campbell & Howden (7, CNCI).

Corthylus donaticus Wood

ECUADOR: Napo, 3 km NW Coyuja, 2500 m, II.29.1976, J.M. Campbell (4, CNCI) (Bright & Skidmore 1997:228).

Corthylus papulans Eichhoff

DOMINICAN REPUBLIC: **LaVega**, Jarabacoa, 440 m, 24.VII–4.VIII.95, riverside uv light, S. & J. Peck (1, SBP) (Bright & Skidmore 1997:229).

Corthylus sentus Wood

MEXICO: **Queretaro**, 10 mi E Landa de Matamores, VI.11.71, 5500′ (3, CNCI) (Bright & Skidmore 1992)

PANAMA: Cerro Campana, 2900′, VIII.1.1970, J.M. Campbell (1, CNCI) (Bright & Skidmore 1997:230).

Corthylus uniseptis Schedl

MEXICO: **Jalisco**, El Tuito, 29.V.82, 640 m, Atkinson y Equihua (2, CNCI) (Bright & Skidmore 1997:230).

Corthylus villus Blandford

HONDURAS: Francisco Morazán, 12 km W Zamorano, Cerro Uyuca, 1870 m, 14°02′N, 87°05′W, 27–30.VI.1994, Ashe & Brooks, ex: flight intercept trap (4, CNCI).

Cryptocarenus heveae (Hagedorn)

DOMINICAN REPUBLIC: **San Cristobal**, Borbon Cuevas Pomier, 200 m, 13–28.VII.95, trop. decid. for. FIT, S. & J. Peck (1, SBP).

TOBAGO: Charlotteville, Man-O-War Bay Cottages, 26–31.VI.93, littoral rain forest uv light, S. & J. Peck (1, SBP).

Dendrocranulus cucurbitae (LeConte)

UNITED STATES: **Texas**, Jeff Davis Co., Madera Cyn., 23 mi N Ft. Davis, VII.19.1974, Bright (18, CNCI) (Bright & Skidmore 1997:120).

Dendrocranulus declivis Schedl

MEXICO: **Veracruz**, Veracruz, 2.IV.82, J. Fco. Duran, *Luffa acutangula* (6, CNCI) (Bright & Skidmore 1997:120).

Dendrocranulus gracilis Wood

MEXICO: **Michoacan**, Uruapan, 1600 m, 16.V.81, Armando Equihua, *Sechium edulis* (4, CNCI) (Bright & Skidmore 1997:120).

Dendrocranulus vicinalis Wood

JAMAICA: Serge Is., XII.6.1988, J.A. McLean, Ipsdienol & Cis-verbenone trap (2, CNCI) (Bright & Skidmore 1997:121).

Dendrosinus bourreriae Schwarz

BAHAMAS: Man-O-War Cay, 20.VIII.71, H. Howden (1, CNCI) (Bright & Skidmore 1997:52).

Dryocoetes granicollis (LeConte)

CANADA: **Manitoba**, Glenlea, 22 July 1987, P.S. Baker (1, CNCI).

UNITED STATES: **Florida**, Jackson Co., Fla. Caverns S. P., 11.VIII.81, S. Peck, floodplain for. UV (1, CNCI) (Bright & Skidmore 1997:128).

Dryocoetoides cristatus (Fabricius)

DOMINICAN REPUBLIC: **LaVega**, Jarabacoa, 440 m, 24.VII–4.VIII.95, riverside uv light, S. & J. Peck (5, CNCI; 7, SBP).

TOBAGO: Goldsborough, 17.II–26.V.1994, M.J. Sommerijer, Mal. trap, neglected citrus orchard bordering primary forest (1, SPBC).

Dryocoetoides paradoxus (Schedl)

ECUADOR: Napo, Tena vicinity, 500 m, 5–10.VII.1976, S. & J. Peck (1, CNCI).

Dryoxylon onoharaense (Murayama)

UNITED STATES: **Tennessee**: Warren Co., Nursery Crop Research Station, ethanol trap, 1997 (1), 1998 (2) (3, USNM).

Euwallacea interjectus (Blandford)

MALAYSIA: **Selangor**, Gombak Field Studies Centre, 9.XII. 1987, S. Taiti & L. Bartolozzi (1, MZUF).

Glochinocerus gamellus Blandford

MEXICO: **Oaxaca**, 32 km S Valle Nacional, 7000', V.21.71, Bright (21, CNCI) (Bright & Skidmore 1997:224).

Gnathotrichus omissus Wood

PANAMA: **Chirqui Prov.**, Cerro Punta, III.7.1959, 6900 ft., H.S. Dybus (1, CNCI) (Bright & Skidmore 1997:213).

HONDURAS: 24 km E Ocotepeque, El Guisayote, 14.VI.1994, 2170 m, 14°25'N, 89°04'W, J. Ashe, R. Brooks, under bark (1, SEMC).

Gnathotrichus perniciosus Wood

MEXICO: **Oaxaca**, Hwy. 131, 178 km S Oaxaca, 7500', V.11.1971, *Pinus* sp., D.E. Bright (13, CNCI) (Bright & Skidmore 1997:213).

Gnathotrichus primus (Bright)

HONDURAS: 24 km E Ocotepeque, El Guisayote, 14–16.VI.1994, 2170 m, 14°25'N, 89°04'W, J. Ashe, R. Brooks #117, ex: flight intercept traps (1, SEMC).

Gnathotrypes bituberculatus (Blandford)

BRAZIL: Belem Para, IPEAN, IV.1.1970, J.M. & B.A. Campbell (11, CNCI); Para Faz. Pirelli Belem, III.30–31.1970, J.M. & B.A. Campbell (4, CNCI); Amazonas, Manaus, 1 km W Taruma Falls, 19.I.1981, 100 m, G. Ekis (10, CNCI) (Bright & Skidmore 1997:214).

COLOMBIA: Ama., Leticia, VBII.9.1970, J.M. Campbell (13, CNCI) (Bright & Skidmore 1997:214).

Gymnochilus reitteri Eichhoff

TOBAGO: Goldsborough, 17.II–26.V.1994, M.J. Sommerijer, Mal. trap, neglected citrus orchard bordering primary forest (1, SBP).

Hylastes fulgidus Blackman

DOMINICAN REPUBLIC: **Pedernales**, ca. 35 km NNW Cabo Rojo, 1370 m, El Aceitillar, 20 Aug. – 09 Sep. 1998, pine forest flight intercept trap (2, CNCI) (Bright & Skidmore 1997:12).

Hylastes opacus Erichson

CANADA: **Ontario**, Port Bruce, 19.IV–4.V.1995 (2, CNCI); **Quebec**: Cookshire (Co. Compton), Sapin de Noël, 20.V.1996 (10, CNCI) (Bright & Skidmore 1997:13); Co. Chambly, Mont St.-Bruno, 45°33′N, 73°19′O, 30.V.–5.VI.2000, Lindgren Alpha-pinene, forét ancienne, Érab. à chêne rouge (3, CFSPQ); Co. Ile-de-Mtl, Bois Saraquay, 45°31′N, 73°45′O, 30.V.–5.VI.2000, Lindgren Alpha-pinene, forét ancienne, Érab. à caryers (4, CFSPQ); Co. Assompt., Bois de Lachenaie, 45°42′N, 73°33′O, 30.V.–5.VI.2000, Lindgren Êthan-Alpha, Forêt 2e venue, Forêt mélangé, Résineux à dom. Pin blanc (4, CFSPQ).

Hylastes tenuis Eichhoff

HAITI: Refuge, 5500′, 22 km SE Fond Verrettes, 18.VII.56, B. & B. Valentine (1, CNCI) (Bright & Skidmore 1997:14).

Hylocurus elegans Eichhoff

MEXICO: **Chiapas**, 13 mi N Ocozocoaulta, VII.2.1969, D.E. Bright (5, CNCI) (Bright & Skidmore 1997:96).

Hylocurus torosus Wood

UNITED STATES: **Pennsylvania**, Shiremanstown, 12.IV.1916 (3, USNM) (Bright & Skidmore 1997:97); **Oklahoma**, Latimer Co., V.83, Karl Stephan (2, CNCI); **Texas**, Burleson Co., TAMU Farm, em. 6–13 Aug. 1982, R. Turnbow (1, CNCI).

Hylurgops longipennis (Blandford)

MEXICO: **Nuevo Leon**, Cerro Potosi, 10 300 ft., VII.15–16.1963, A.T. Howden (1, CNCI) (Bright & Skidmore, 1997:9).

Hylurgops porosus (LeConte)

MEXICO: Cahuacan, B. Roger, C. R. (1, Univ. of Colorado).

Hypothenemus birmanus (Eichhoff)

TOBAGO: Goldsborough, 17.II–26.V.1994, M.J. Sommerijer, Mal. trap, neglected citrus orchard bordering primary forest (2, SBP); Charlotteville, Man-O-War Cottages, 26–31.VI.93, littorial rain forest uv light, S. & J. Peck (2, SBP).

Hypothenemus crudiae (Panz.)

DOMINICAN REPUBLIC: **San Cristobal**, Borbon Cuevas Pomier, 200 m, 13–28.VII.95, trop. decid. for. FIT, S. & J. Peck (2, CNCI; 3, SBP).

Hypothenemus dissimilis (Zimm.)

UNITED STATES: **Kansas**, Douglas Co., Breidenthal Res., 2 mi N Baldwin, 6 Oct. 1983, J. Pakaluk, beating vegetation (4, SEMC).

Hypothenemus dolosus Wood

JAMAICA: **St. Andrews**, St. Peters, VII.9.1966 (2, CNCI) (Bright & Skidmore 1997:192).

Hypothenemus eruditus (Westwood)

DOMINICAN REPUBLIC: San Cristobal Prov., Borbon Cuevas Pomier, 200 m, 13–28.VII.95, trop. decid. for. FIT, S. & J. Peck (4, CNCI, 4, SBPC).

TOBAGO: Charlotteville, Man-O-War Bay Cottages, 26–31.VI.93, littorial rain forest uv light, S. & J. Peck (3, SBPC); 10 km NE Roxborough, Gilpin Trail, 26–31.VI.93, 400–500 m, montane rain forest FIT, S. & J. Peck (2, SBPC).

Hypothenemus plumeriae (Nordlinger)

TOBAGO: Goldsborough, 17.II–26.V.1994, M.J. Sommerijer, Mal. trap, neglected citrus orchard bordering primary forest (8, SBPC).

Hypothenemus rotundicollis (Eichhoff)

TOBAGO: Goldsborough, 17.II–26.V.1994, M.J. Sommerijer, Mal. trap, neglected citrus orchard bordering primary forest (1, SBPC).

UNITED STATES: **Oklahoma**, Latimer Co., 5 mi W Red Oak, 9 Apr. 1985, beating, J. Pakaluk (5, SEMC).

Hypothenemus squamosus (Hopkins)

TOBAGO: Charlotteville, Man-O-War Bay Cottages, 26–31.VI.93, littorial rain forest uv light, S. & J. Peck (1, SBPC).

Micracis lignator Blackman

MEXICO: **Nuevo Leon**, Cerro Potosi, 9500, V.3.71, *Quercus* sp., D.E. Bright (5, CNCI).

Micracis ovatus Wood

MEXICO: **Veracruz**, Banderilla, 14.I.1984, Felipe A. Noguera (6, CNCI) (Bright & Skidmore 1997:98).

Micracisella knulli (Blackman)

MEXICO: **Oaxaca**, Hwy. 175, 3 mi N Suchixtepec, 9500′, VI.4.71, D.E. Bright (9, CNCI) (Bright & Skidmore 1997:97).

Micracisella nanula (LeConte)

UNITED STATES: **Oklahoma**, Latimer Co., VI.1984, K. Stephen (3, CNCI) (Bright & Skidmore 1997:97).

Micracisella opacicollis (LeConte)

UNITED STATES: **Georgia**, Clarke Co., Whitehall Forest, [various dates April to August, 1976], window trap (8, CNCI) (Bright & Skidmore 1997:97).

Microborus boops Blandford

TOBAGO: Charlotteville, Man-O-War Bay cottages, 26–31.VI.93, littorial rain forest uv light, S. & J. Peck (1, SBPC).

Microcorthylus demissus Wood

MEXICO: **Chapias**, Lagos des Colores, V.17.1969, D.E. Bright (11, CNCI); **Oaxaca**, 6 mi S Valle Nacional, 2000′, V.18.71, D.E. Bright (4, CNCI); 15 mi S Valle Nacional, 4000′, V.20.71, Bright (7, CNCI) (Bright & Skidmore 1997:225).

Microcorthylus vescus Wood

MEXICO: **Puebla**, Apulco (entre Zacapoaxtla y Cuetzalan), 4.05.81, 1480 m, T.H. Atkinson y A. Equihua (2, CNCI); **Veracruz**, Xalapa, 9.VIII.83, Filipe A. Noguera (2, CNCI) (Bright & Skidmore 1997:225).

Monarthrum bicolor (Ferrari)

COLOMBIA: **Magad.**, San Lorenzo, 41 km S Sta. Maria, 7000′, V.10.1973, Campbell & Howden (1, CNCI) (Bright & Skidmore 1997:219).

Monarthrum bidentatum Wood

MEXICO: **Chiapas**, 5 mi S El Bosque, VII.3.1969, D.E. Bright (2, CNCI) (Bright & Skidmore 1997:219).

Monarthrum conversum Wood

MEXICO: **Michoacan**, Uruapan, XI.1.80, 1600 m, *Persea americana* (Lauraceae) (2, CNCI) (Bright & Skidmore 1997:220).

Monarthrum cordatum (Blandford)

HONDURAS: F. Morazán, 30 km E Tegucigalpa, Cerro Uyuca, 6.VI.1994, 1800 m, H. & A. Howden (1, CNCI).

Monarthrum desum (Wood)

MEXICO: **Guerrero**, Chilapa, 23.II.82, 2040 m, Atkinson y Equihua, *Quercus* sp. (8, CNCI) (Bright & Skidmore 1997:220).

Monarthrum dimidiatum (Ferrari)

MEXICO: **Oaxaca**, 6 mi S Valle Nacional, 2000′, 18–20.V.71, S. Peck, dung & carrion trap (1, CNCI); **Veracruz**; 10 mi N Sontecomapan, VI.20.1969, Bright & Campbell (2, CNCI) (Bright & Skidmore 1997:221).

Monarthrum exornatum (Schedl)

MEXICO: **Chiapas**, 5 mi SW El Bosque, VII.3.1969, D.E. Bright (1, CNCI); 13 mi N Ocozocoaulta, VII.2.1969, D.E. Bright (1, CNCI); 10 mi S Malpaso, V.24.1969, J.M. Campbell (1, CNCI); **Oaxaca**: 92 mi N Oaxaca, 3000′, V.18.71, Bright (1, CNCI); 20 mi S Juchatengo, 6000′, 27–30.V.1971, S. Peck (1, CNCI) (Bright & Skidmore 1997:221).

Monarthrum fimbriaticorne (Blandford)

TRINIDAD: Morne Bleu, 2700, Aug. 8 & 15, 1969, H. & A. Howden (2, CNCI) (Bright & Skidmore 1997:221).

Monarthrum ingens (Eichhoff)

ECUADOR: Napo Baeza, 1500 m, III.5.1976, J.M. Campbell (1, CNCI) (Bright & Skidmore 1997:221).

Monarthrum laterale (Eichhoff)

MEXICO: **Oaxaca**, Hwy 131, 176 km S Oaxaca, 7500, V.11.1971, *Pinus* sp., D.E. Bright (4, CNCI) (Bright & Skidmore 1997:222).

Monarthrum lobatum (Ferrari)

PERU: **Junin**, Utcuyacu, Tarma, 1600–3000 m, Mar. 9, 1948 (1, CNCI); Lima, Verrugas Canyon, 25.6.1928, R.C. Shannon (1, USNM) (Bright & Skidmore 1997:222).

Monarthrum nevermanni (Schedl)

PANAMA: **Chiriqui**, Cerro Punta (on trail to Boquete), 6600′, III.7.1957, H.S. Dybas, under bark (1, CNCI) (Bright & Skidmore 1997:222).

Monarthrum pennatum (Schedl)

MEXICO: **Chiapas**, 13 mi N Ocozocoaulta, VII.2.1969, D.E. Bright (1, CNCI) (Bright & Skidmore 1997:222).

Monarthrum subductum (Schedl)

ECUADOR: Napo Baeza, 1500 m, III.5.1976, J.M. Campbell (1, CNCI) (Bright & Skidmore 1997:223).

Monarthrum tetradontium Wood

MEXICO: **Morelos**, Sta. Catarina (Mpio. Tepoztlan), 16.IX.81, *Quercus* sp., 1600 m, A. Burgos (2, CNCI) (Bright & Skidmore 1997:224).

Monarthrum umbrinum (Blandford)

MEXICO: **Oaxaca**, 15 mi S Valle Nacional, 4000′, V.20.71, Bright (1, CNCI) (Bright & Skidmore 1997:224).

Orthotomicus caelatus (Eichhoff)

BAHAMAS: **Andros Island**, San Andros Robinson's Place, J. Browne, 10.IV.1987, wet pineland-blk.tr. (1, CNCI) (Bright & Skidmore 1997:104).

Pagiocerus frontalis (Fabricius)

MEXICO: **Chiapas**, 17 mi SE Teopisca, Rt 24, VI.3–4.1969, H.F. Howden (1, CNCI); **Oaxaca**, 140 km on Hwy. 175, 4000′, May 22, 1969, H.F. Howden (1, CNCI) (Bright & Skidmore 1997:44).

Phloeotribus insularis Eggers

DOMINICA: 1.2 mi N Pont Casse, VIII.17.1954, T.J. Spillman (1, USNM) (Bright & Skidmore 1997:48).

Phloeotribus setulosus Eichhoff

JAMAICA: **Try.**, Barbecue Bottom, VIII.15.1966, H.F. Howden (1, CNCI); Duncans, VIII.21.1966, H.F. Howden (2, CNCI); Good Hope, VIII.17.1966, H.F. Howden (1, CNCI) (Bright & Skidmore 1997:51).

Phloeotribus uniseriatus Eggers

BRAZIL: Sinop. M. Grosso, X.1975, M. Alvarenga (17, CNCI).

ECUADOR: Puerto Napa on Rio Napa, 500 m, VII.8.1976, S. Peck, at light (1, CNCI).

PERU: **Tambopata Prov.**, 15 km NE Pto. Maldonado, 1 July 1989, 200 m, J. Ashe & R. Leschen, under bark (many specimens, SEMC & CNCI).

Pityogenes hopkinsi Swaine

UNITED STATES: **Iowa**, Clayton Co., White Pine Reserve, near Garnaville, IV.12.1980, *Pinus strobus*, D. Bright, coll. (13, CNCI) (Bright & Skidmore 1997:101).

Pityophthorus antillicus Bright

VIRGIN ISLANDS: **St Croix**, Est. William Frederiksted, 5–12 Feb. 1981, colr. D. Hutchins (1, CNCI) (Bright & Skidmore 1997:204).

Pityophthorus balsameus Blackman

UNITED STATES: **Maryland**, Garrett Co., Keysers Ridge, 28 May 1997, ex. spruce (1, RJRC).

Pityophthorus cariniceps LeConte

UNITED STATES: **Maryland**, Baltimore co., White Marsh, 14 May 1997, ex. chalcoprax (1, RJRC).

Pityophthorus deletus LeConte

UNITED STATES: **Idaho**, Coeur d'Alene, White Pine Seed Orchard, Trap #18 Treat. Chiral-, 5–19–2000; same locality and date, Trap #35, Treat. Pityol, α-pinene; same locality and date, Trap #5, Treat. Pityol, α-pinene (16, ex. U.S.D.A., Forest Service, Placerville, CA; 2 in CNCI).

Pityophthorus intextus Swaine

CANADA: **Yukon Territory**, Kluane National Park, Sheep Mountain, VI.15.1981, D. Bright, coll., *Picea glauca* (22, CNCI); Mile 64, Dempster Hwy., VI.20.1981, D. Bright, coll., *Picea* sp. (8, CNCI) (Bright & Skidmore 1997:207).

Pityophthorus liquidambarus Blackman

UNITED STATES: **Delaware**, Sussex co., Redden State Forest, HQ Tract, 28 July 1997, M.A. Valenti (1, RJRC).

Pityophthorus puberulus (LeConte)

UNITED STATES: **Iowa**, Clayton Co., White Pine Reserve, near Garnaville, IV.12.1980, *Pinus strobus*, D. Bright, coll. (2, CNCI) (Bright & Skidmore 1997:210); **Delaware**: New Castle Co., Newport, 28 April 1998, ex. pinene (1, RJRC); Sussex Co., Redden State Forest, HQ tract, 24, 27 June 1998, M.A. Valenti (2, RJRC); **Maryland**: Garrett Co., Swallow Falls, sulcatol (1, RJRC).

Pityophthorus pulicarius (Zimmerman)

BAHAMAS: **Andros Island**, Mennenite's Farm, 30.VII.1987, J. Browne, black lite (2, CNCI) (Bright & Skidmore 1997:211).

Premnobius cavipennis Eichhoff

BAHAMAS: **Andros Island**, London Ridge, 2.7 mi N, 0.8 mi E Forfar F. Sta., 5 May 1994, R.S. Anderson, high interior coppice litter (1, SEMC).

Procryphalus mucronatus (LeConte)

CANADA: **British Columbia**, Fort St. James, 97–06–25, C. Small (1, UBC); Fort St. James, 95–06–01, D. Rodriquez (1, CNCI).

Pseudopityophthorus minutissimus (Zimmermann)

CANADA: **Nova Scotia**: Lunenburg Co., Bridgewater, 19 June 1965, B. Wright (5, NSMNH); **Ontario**: Angus, Sept. 30, 1942, red oak, K.E. Stewart and H.S. Fleming (33, CNCI); **Quebec**: Old Chelsea, Summit of King Mountain, 27.V.1963 (1, CNCI); Gatineau Park, Alymer, VII.14.1977, D.E. Bright, *Quercus* sp. (7, CNCI); Ste. Anne's, J.M. Swaine (10, CNCI).

Pseudothysanoes brunneus Wood

UNITED STATES: **New Mexico**, Emery Pass, VII.24.1974, D.E. Bright, coll., *Quercus* sp. (2, CNCI) (Bright & Skidmore 1997:93).

Pseudothysanoes contrarius Wood

MEXICO: **Veracruz**, El Costillo, 18.VII.1983, 1200 m, Atkinson & Equihua, *Acacia pennatula* (Leguminosae) (3, CNCI) (Bright & Skidmore 1997:93).

Pseudothysanoes dislocatus (Blackman)

DOMINICAN REPUBLIC: **San Cristobal Prov.**, Borbon Cuevas Pomier, 200 m, 13–28.VII.95, trop. decid. for. FIT, S. & J. Peck (6, CNCI; 7, SBPC).

Pseudothysanoes fimbratus Wood

MEXICO: **Veracruz**, 5 km W Acajete, 7.VI.1983, 2150 m, T.H. Atkinson & Armando Equihua, *Phoranodendron* sp. (4, CNCI) (Bright & Skidmore 1997:94).

Pseudothysanoes frondicolens Wood

UNITED STATES: **California**, Joshua Tree Natl. Mon., Cottonwood Springs, IX.28.1981, Yucca leaves, D.E. Bright, coll. (21, CNCI) (Bright & Skidmore 1997:94).

Pseudothysanoes funebris Wood

MEXICO: **Oaxaca**, Hwy. 175, 3 mi N Suchixtepec, 9500′, VI.4.1971, Mistletoe on alder, D.E. Bright, coll. (12, CNCI) (Bright & Skidmore 1997:94).

Pseudothysanoes huachucae Wood

UNITED STATES: **New Mexico**, Grant Co., 10 mi NE San Lorenzo, VII.25.1974, D.E. Bright, coll., Mistletoe on oak (19, CNCI); **Texas**: Culberson Co., McKitteric Cyn., Guadeloupe Mtns. National Park, VII.16.1974, D.E. Bright, coll., Mistletoe on oak (14, CNCI) (Bright & Skidmore 1997:94).

Pseudothysanoes peniculus Wood

MEXICO: **Mexico**, San Dieguito, I.4.1980, A.T. Atkinson, collr., *Phorandendron velutinum* (16, CNCI) (Bright & Skidmore 1997:94).

Pseudothysanoes yuccavorus Wood

MEXICO: **Hidalgo**, Pachuca, III.27.1981, 2300 m, A.T. Atkinson, collr., *Yucca* sp. (6, CNCI) (Bright & Skidmore 1997:95).

Pycnarthrum hispidium (Ferrari)

BAHAMAS: Man-O-War Cay, 20.VIII.71, H. Howden (2, CNCI) (Bright & Skidmore 1997:85).

DOMINICAN REPUBLIC: **LaVega**, Jarabacoa, 440 m, 24.VII–4.VIII.95, riverside uv light, S. & J. Peck (1, SBPC).

Scolytodes nitidissimus (Eggers)

CUBA: **Santiago**, Gran Piedra, Segundo Chorroito, 7–17.XII.95, 600 m, km 8, forest stream FIT, S. Peck, 95–83 (1, CNCI); Terrazas, 11.VI.1997, J. Torres, collr., In *Cecropia* leaves (4, CNCI, USMN).

DOMINICA: 0.3, 1.3, and 2.2 mi W Pont Casse, 22.VII.1964, T.J. Spilman, in petioles, *Cecropia* petioles (2, USNM; 1, CNCI).

Scolytoplatypus pubescens Hagedorn

VIETNAM: **Vinh Yen**, Tam Dao, 900 m, 21°26′N, 105°38′E, at light, No. 46, 13.X.1986, Mészáros-Oláh-Vásárhelyi (2, NHMB).

Scolytus opacus Blackman

CANADA: **British Columbia**, Fort St. John, Hobson Island, 94–08–08, D. Rodriquez, trap #2 (1, UBC).

Scolytus quadrispinosus Say

UNITED STATES: **Minnesota**, Elk River, VIII.8.1959, E.J. Kiteley (3, CNCI) (Bright & Skidmore 1997:81).

Tricolus badius Wood

MEXICO: **Chiapas**, 13 mi N Ocozocoaulta, VII.1.1969, D.E. Bright (1, CNCI) (Bright & Skidmore 1997:215).

Tricolus inornatus Wood

MEXICO: **Guerrero**, Chilapa, 1640 m, 23.II.82, Atkinson y Equihua, *Ardisia* sp. (Myrsinaceae) (2, CNCI) (Bright & Skidmore 1997:216).

Tricolus nodifer Blandford

MEXICO: **Chiapas**, 13 mi N Ocozocoaulta, VII.21.1969, D.E. Bright (1, CNCI) (Bright & Skidmore 1997:216).

Tricolus ovicollis Blandford

MEXICO: **Oaxaca**, 6 mi S Valle Nacional, 2000′, V.18.1971, D.E. Bright (2, CNCI); Hwy. 175, 3.5 mi S Suchixtepec, 8000′, VI.2.1971 (1, CNCI) (Bright & Skidmore 1997:216).

Trypodendron domesticum (Linnaeus)

CANADA: **British Columbia**: Surrey, Port Mann Landfill, 31.VII.1997, *Acer macrophyllum* (10, CNCI); **Prince Edward Island**, Camp Tamawaby, Prince Co. (2, Canada Forest Service, Fredericton, NB) (established?).

Trypodendron scabricollis (LeConte)

UNITED STATES: **Oklahoma**: Latimer Co., III.1986, K. Stephan (8, CNCI).

Xyleborinus andrewesi (Blandford)

CUBA: **Santiago**, Gran Piedra, Met. Radar, 6–17.XII.95, 1100 m, elfin for. FIT, S. Peck 95–76 (1, SBPC).

Xyleborinus gracilis (Eichhoff)

MEXICO: **Chiapas**, Laguna Belgica, 16 km NW Ocozocoautla, 970 m, 31.V.1990, H. & A. Howden (1, CNCI).

ECUADOR: NAPO, Jutun Sacha Biol. Sta., 21 km E Puerto Napo, 400 m, 8.VII.1994, F. Génier, lowland rain forest, FIT (1, SEMC).

Xyleborus asper Eggers

PERU: **Tambopata**, Madre de Dios. Dpto., 15 km NE Puerto Maldonado, Reserva Cuzco Amazónico, 200 m, 13 June 1989, J.S. Ashe & R.A. Leschen, flight intercept trap (2, SEMC).

TOBAGO: 10 km NE Roxborough, Gilpin Trail, 26–31.VI.93, 400–500 m, montane rain forest FIT, S. & J. Peck (1, SBPC).

Xyleborus concentus Wood

ECUADOR: NAPO, Jutun Sacha Biol. Sta., 21 km E Puerto Napo, 400 m, 9.VII.1994, F. Génier, lowland rain forest, FIT (3, SEMC).

Xyleborus discretus Eggers

PANAMA: **Coclé**, 7.2 km NE El Copé, 730 m, 20.V.1995, J. Ashe & R. Brooks, flight intercept trap (1, SEMC); **Panama**, Barro Colorado Island, 24 Aug. 1994, D. Banks, flight intercept trap (1, SEMC).

Xyleborus elevatus Egg

DOMINICAN REPUBLIC: **LaVega**, PN. A. Bermudez, Cienaga, 19.VII.–2.VIII.95, 1000 m, tropical evergreen forest FIT, S. & J. Peck (3, CNCI; 4, SBPC).

Xyleborus ferrugineus (Fabricius)

TOBAGO: Charlotteville, Man-O-War Bay Cottages, 26–31.VI.93, littorial rain forest uv light, S. & J. Peck (10, SBPC); 10 km NE Roxborough, Gilpin Trail, 26–31.VI.93, 400–500 m, montane rain forest FIT, S. & J. Peck (10, SBPC); Goldsborough, 17.II–26.V.1994, M.J. Sommerijer, Mal. trap, neglected citrus orchard bordering primary forest (2, SBPC).

Xyleborus pfeili (Ratzburg)

UNITED STATES: **Oregon**, Jasper-Poden Ln., 43.963"N, 122.875"W, Trap #39-04E, 13.VII 1999 (2, Oregon Dept. Agriculture) (established?).

Xyleborus posticus Eichhoff

MEXICO: **Campeche**, Escarcega (6 km W) Tormento, 12–23.VII.1983, 110 m, S. & J. Peck, evergreen trop. forest (2, CNCI); Hidalgo, 43 km SW Huejutla, Tlanchinol, 14.VI–4.VIII.1983, S. & J. Peck (2, CNCI); **San Luis Potosí**, 20 km W Xilitla, 12.VI–6.VIII.1983, S. & J. Peck, cloud for. fl. interc. (3, CNCI); **Tamaulipas**, Gomez Farias, Rancho del Cielo, 1000 m, 6.VI–7.VIII.1983, S. & J. Peck (8, CNCI).

Xyleborus rugosipennis Schedl

TRINIDAD: Morne Bleu, 2700', Aug. 8, 1969, H. & A. Howden (3, CNCI, det. S.L. Wood).

Xyleborus semipunctatus Eggers

PERU: **Tambopata**, Marde de Dios Dpto., 15 km NE Puerto Maldonado, Reserva Cuzco Amazónico, 200 m, 2 July 1989, J.S. Ashe & R. Leschern, flight intercept trap (1, SEMC).

Xyleborus similis Ferrari

INDONESIA: **Bali**, ?? Besakih, 21.II.1987, S. Taiti & C. Manicastri (1, MZUF) (Bright & Skidmore 1997:165).

Xyleborus simulatus Bright

DOMINICAN REPUBLIC: **LaVega**, PN. A. Bermudez, Cienaga, 19.VII.–2.VIII.95, 1000 m, tropical evergreen forest FIT, S. & J. Peck (2, CNCI; 2, SBPC).

Xyleborus spinulosus Blandford

PERU: **Tambopata**, Marde de Dios Dpto., 15 km NE Puerto Maldonado, Reserva Cuzco Amazónico, 200 m, swamp trail, 16 July 1989, J.S. Ashe & R. Leschern, flight intercept trap (1, SBPC).

Xyleborus titubanter Schedl

MEXICO: **Veracruz**, 2.5 km S Jalapa, 26 May 1991, 1370 m, J.S. Ashe, under bark (3, SEMC; 2, CNCI).

Xyleborus volvulus (Fabricius)

TOBAGO: Charlotteville, Man-O-War Bay Cottages, 26–31.VI.93, littorial rain forest uv light, S. & J. Peck (13, SBPC); Goldsborough, 17.II–26.V.1994, M.J. Sommerijer, Mal. trap, neglected citrus orchard bordering primary forest (3, SBPC).

PITCAIRN ISLANDS: **Henderson Islands**, NW Beach (near campsite), IHEN May 1987 (11, USNM).

Xylechinus fuliginosus Blandford

GUATEMALA: **Quetzaltenango**, 12 km SE Zunil, 14°41.7′N, 91°27.5′W, 2700 m, NW face Cerro Zunil, 28 May 1991, Robert Anderson, ex:hardwood for. litter (3, CNCI).

MEXICO: **Oaxaca**, 40 mi S Valle Nacional, 9500′, V.25.1971, H. Howden (1, CNCI).

Xylosandrus crassisculus (Mots.)

UNITED STATES: **Tennessee**, Chestnut, J.B. Oliver; UT Arboretum, Oak Ridge.

Xylosandrus germanus (Blandford)

CANADA: **British Columbia**, Richmond, Lindgren trap, various dates 1995 (10, CNCI) (Bright & Skidmore 1997:169). **Quebec**, Co. Chambly, Mont St-Bruno, 45°33′N, 73°19′O, 7.VIII–14.VIII.2000 (6) & 14.VIII–21.VIII.2000 (4), Lindgren Alpha-pinene, forét ancienne, Érab. à chêne rouge (10, CNCI and CFSPQ).

UNITED STATES: **Virginia**, Shenandoah Co., 16 km S Strasburg, Elizabeth Furnace, 12.V–22.VIII.1983, S. & J. Peck (15, CNCI); Bath Co., 9.6 km N Clifton Forge, 13.V–21.VIII.1983, S. & J. Peck (3, CNCI) (Bright & Skidmore 1997:169).

Xylosandrus ursinus (Hagedorn)

INDONESIA: **Sulawesi Utara**, Domoga-Bone N[ational] P[ark], 28 Aug. 1985, Chen Young (3, Carneige Mus.).

Platypodidae

Carphodicticus cristatus Wood

BRAZIL: Santarem (1, CNCI).

PERU: Jauja Prov., Junin Dept., 840 m, Sani Beni (8km. E Satipo), Oct.–Nov. 1935, Felix Woytkowski (3, CNCI).

Euplatypus pulicaris (Chapuis)

DOMINICAN REPUBLIC: **LaVega**, PN. A. Bermudez, Cienaga, 19.VII.–2.VIII.95, 1000 m, tropical evergreen forest FIT, S. & J. Peck (2, SBPC).

Mecopelmus zeteki Blackman

COSTA RICA: **Limón**, Valle de la Estrella, El Progresso, nr. Pandora, 18 Feb. 1984, H. & A. Howden (1, CNCI).

PERU: **Tambopata**, 15 km NE Plo. Maldonato, 11 June 1989, 200 m, J. Ashe, R. Leschen, at light (1, SEMC).

Platypus querceus Wood

MEXICO: **Chiapas**, Yerba Buena, 2 mi N Bochil, VII.10.1969, D.E. Bright (1, CNCI).

Teloplatypus excisus (Chapuis)

DOMINICAN REPUBLIC: **LaVega**, PN. A. Bermudez, Cienaga, 19.VII.–2.VIII.95, 1000 m, tropical evergreen forest FIT, S. & J. Peck (1, SBPC).

Tesserocerus spinax Blandford

ECUADOR: Sucumbios, Sacha Lodge, 0.5°S, 76.5°W, 270 m, 23.IV–4.V.1994, ex. malaise, Hibbs (9, SEMC,CNCI).

FRENCH GUIANA: Matoury, 41.5 km SSW on Hwy. N2, 4°37′22″N, 52°22′36″W, 50 m, 29 May – 9 June 1997, J. Ashe, R. Brooks, flight intercept trap (1, SEMC); Roura, 18.4 km SSE, 240 m, 4°36′38″N, 52°13′26″W, 25–29 May 1997, J. Ashe, R. Brooks, flight intercept trap (1, SEMC).

Tesserocranulus nevermanni Schedl

BOLIVIA: Dept. of Cochabama, Prov. of Chapare, Ato Palmor, X.28.59 (1, CNCI).